

CU-001

ASC 12995

SOUTHERN TIP OF CULROSS ISLAND

ACE 1369530



- Prince William Sound -

DOCUMENTS IN STREAM FILES

ASC# _____ Segment # _____

____ '89 Intertidal Assessment Survey, Sport/Com. Fish
____ '89 Shoreline Clean-Up Program (SAT)
____ '89 Anadromous Fish Stream Authorization, for instream work
____ '89 Stream Treatment Reports
____ '89 Demobilization Reports ____ Bioremediation ____ other
____ '89 RLS Sheet ____ Oil sed. sample ____ Egg sample
____ '89 Fall Walk-a-thon Survey, ADEC
____ '89 Winter Assess. Study Site ____ Winter Stream Survey Form
____ '89 Other Documents _____

____ '90 Pre-Anadscat Survey, multi-assessment form
____ '90 Anadscat Survey
____ '90 Anadromous Fish Stream Evaluation (work order)
____ '90 Anadromous Fish Stream Addendum to work order
____ '90 Shoreline Evaluation, SAT and work order for segment
____ '90 Anadromous Fish Stream Authorization, Title 16 permit
____ '90 Stream Treatment Report
____ '90 ADEC Demobilization Report for Bio
____ '90 ADF&G Oiling Condition Survey, for ASAP use (Aug. surv.)
____ '90 ASAP Survey ____ ASAP Rec. ____ ADEC Rec. (Feb.)
____ '90 Other Documents _____



ADF&G MULTI-ASSESSMENT DATA FORM

AJW
Pre-ANADSCAT-901 SURVEY TYPE: BS SS DS TS AVS SCHA MMHS PTA

2 REGION: PWS KP, CI K, AP

METHOD: Aerial Ground Boat3 DATE: 4-13-9015 HIGH TIDE TIMES: 121 TEAM RECORDER: R. Gurtin4 START TIME: 095416 HIGH TIDE HTS: 122 OBSERVERS: B. Leman5 STOP TIME: 100217 LOW TIDE TIMES: 123 AGENCY: Exxon6 SEGMENT #: CU00118 LOW TIDE HTS: 124 PHOTOS TAKEN: Y (N)

7 STATION #:

19 TIDE HT AT SURVEY:

Roll #: Frame:

8 K-UNIT:

Ebb Slack Flood Slack

25 VIDEO TAKEN: Y (N) TAPE#:

9 STAT AREA:

20 USCG QUAD:

Start: End:

10 LAT:

11 LONG:

26 SAMPLES TAKEN? Y (N) Number12 SOURCE: Map Loran13 LOCATION: Culross Is.14 DESCRIPTION: South East side inside Applegate Is.

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M ²	%	L	W	M ²	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								

30 OVERALL OIL IMPACT: N VL L M H31 OIL TYPE: Pooled Mousse Tar Asphalt Sticky Stain32 OILED DEBRIS? (Y) N33 SHORELINE TYPE: Headland Low-lying Rocks Beach Cove
Lagoon Marsh34 WAVE EXPOSURE: High Moderate Low35 SUBSTRATE TYPE: Bedrock / Boulder / Cobble /Gravel / Sand / Mud/silt /36 CATALOGED ANAD. FISH SREAM? (Y) N37 CATALOG #: 12995

38 STREAM NAME:

39 OIL IN STREAM BED? Y (N)40 OIL ON STREAM BANKS? (Y) N41 OIL ON BEACH ADJACENT TO MOUTH? (Y) N
(within 50 meters)42 OIL WITHIN 1 MILE OF STREAM? (Y) NWhere: Upper Intertidal

43 ANADROMOUS FISH PRESENT? Y N

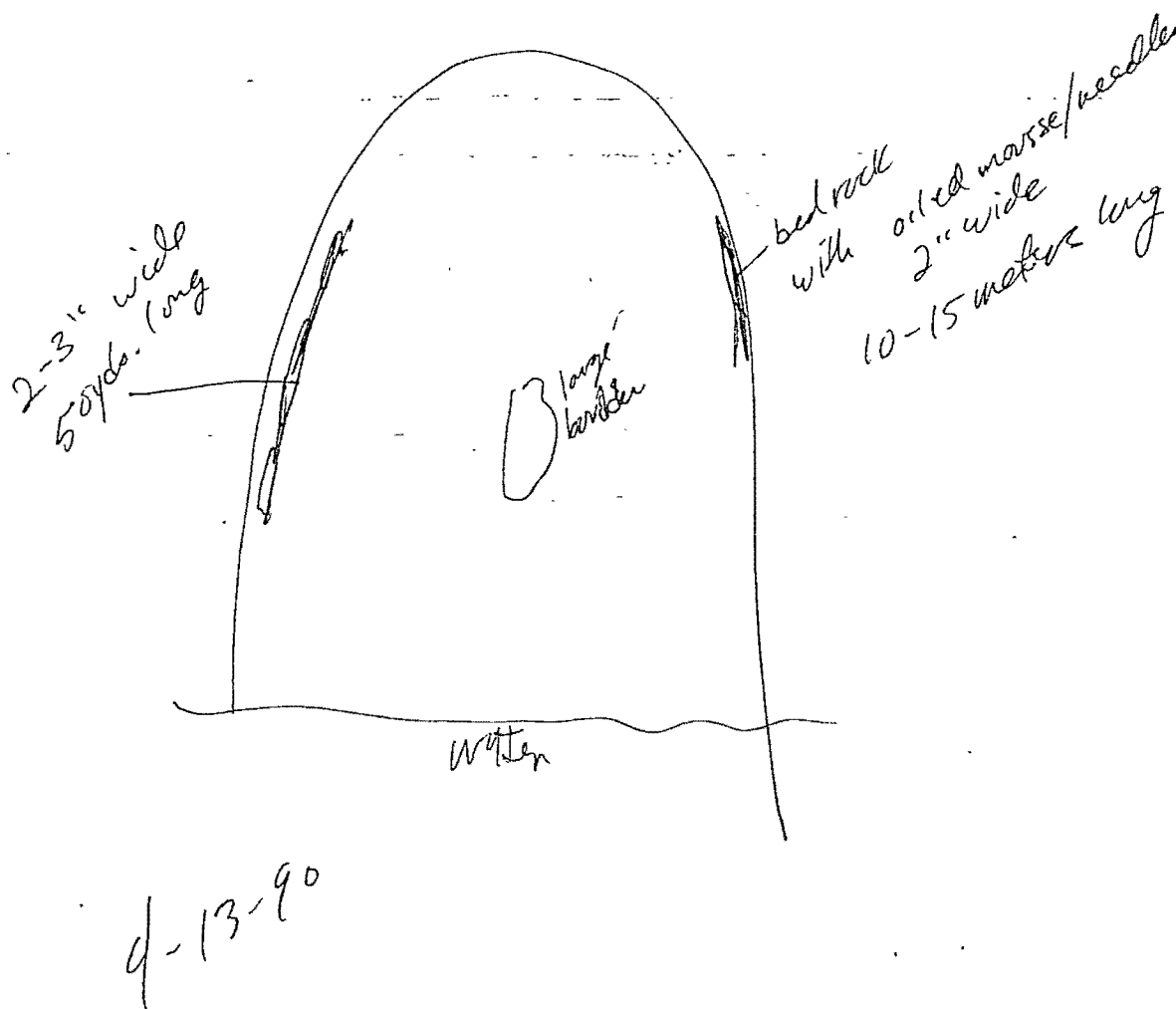
44 ANADROMOUS FISH OBSERVATION
Species Aerial Ground

COMMENTS: narrow bands of oiled /mousse/needles
at upper intertidal each bank.Shovel /Steam

FRAME(S)

DESCRIPTION

46 OIL DISTRIBUTION DIAGRAM



CU001 AIW
224-20-12995

Sample taken
Photo frame # and
shot direction.

ACE 7236760-15

ASC NUMBER:

SEGMENT NUMBER:

YR CATALOGED:

LOCATION:

STREAM NAME:

KODIAK K-UNIT:

USGS QUADRANGLE:

SHORELINE TYPE:

LOCAL STREAM #:

ALL SEGMENTS:

LATITUDE:

LONGITUDE:

LEGAL: S

ASC NUMBER: 224-20-12925

SURVEY TYPE:

METHOD:

DATE: 4/13/90

START TIME:

STOP TIME:

TEAM RECORDER:

OBSERVERS:

AGENCY(IES):

PHOTOS TAKEN?

Roll #:

Frames:

VIDEO TAKEN?

Tape Number:

Counter Start:

WAVE EXPOS:

SAMPLES TAKEN?

SAMPLE I.D. NUMBERS: 1.
4.2.
5.3.
6.

	LENGTH ^m	WIDTH ^m	M2	%	THICK	PEN	OIL TYPE
SITE 1	45	.05					MS/AP
SITE 2	10	.05					MS/AP
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT:

OIL IN STREAM CHANNEL?

OIL ON BEACH WITHIN 50M OF STREAM MOUTH?

SUBSTRATE

Bedrock	Granule
Boulder	Sand
Cobble	Silt
Pebble	Veget.

SPECIES

COUNT

COMMENTS:



ALASKA DEPT. OF
FISH & GAME

ANADSCAT-90

APR 30 1990

ADF&G MULTI-ASSESSMENT DATA FORM

REGION II
HABITAT DIVISION

1 SURVEY TYPE: BS SS DS TS AVS SCH MMS PTA

REGION: PWS KP, CI K, AP

METHOD: Aerial Ground Boat

3 DATE: 4-26-90

15 HIGH TIDE TIMES: 1

21 TEAM RECORDER: P. Gorte

4 START TIME: 10:25

16 HIGH TIDE HTS: 1

22 OBSERVERS: A. Weseman

5 STOP TIME: 10:55

17 LOW TIDE TIMES: 1

23 AGENCY: ADF&G

6 SEGMENT #: C4001

18 LOW TIDE HTS: 1

24 PHOTOS TAKEN: Y N

7 STATION #:

19 TIDE HT AT SURVEY:

Roll #: Frame:

8 K-UNIT:

Ebb Slack Flood Slack

25 VIDEO TAKEN: 0 N TAPE#: 90AJW002SSS

9 STAT AREA:

20 USCG QUAD: SC4

Start: 0549 End: 0760 0795

10 LAT:

11 LONG:

26 SAMPLES TAKEN? Y N Number

12 SOURCE: Map Loran

13 LOCATION: Culross I

14 DESCRIPTION: Se tip - across from Applegate I

Oil

Sediment

Biological

Water

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M ²	%	L	W	M ²	%
27 SURFACE COVERAGE				<u>23%</u>				<u>0</u>

36 CATALOGED ANAD. FISH STREAM? Y N

37 CATALOG #: 224-20-12995

38 STREAM NAME:

28 SURFACE THICKNESS

<u>1cm</u>							
<u>1-2cm</u>							

39 OIL IN STREAM BED? Y N

29 PENETRATION

40 OIL ON STREAM BANKS? Y N

30 OVERALL OIL IMPACT: N VI L M H

41 OIL ON BEACH ADJACENT TO MOUTH? Y N
(within 50 meters)

31 OIL TYPE: Pooled Mousse tar Asphalt Sticky Stain

42 OIL WITHIN 1 MILE OF STREAM? Y N

32 OILED DEBRIS? Y N

Where:

33 SHORELINE TYPE: Headland Low-lying Rocks Beach Cove
Lagoon Marsh

43 ANADROMOUS FISH PRESENT? Y N

34 WAVE EXPOSURE: High Moderate Low

44 ANADROMOUS FISH OBSERVATION
Species Aerial Ground

35 SUBSTRATE TYPE: Bedrock Boulder 5% Cobble 20%
Gravel 75% Sand Mud/silt

COMMENTS: Broken farm matts/sporadic patches upper intertidal RSEDS near falls

spruce stain/surface coating on LSEDS in bedrock cliffs down

low with needles

(1/2 meter x 15 meter sporadic patchy)

(0.25 sq. meter of tar ball/patchy)

ACE 7236739-15

CU001
224-20-12995

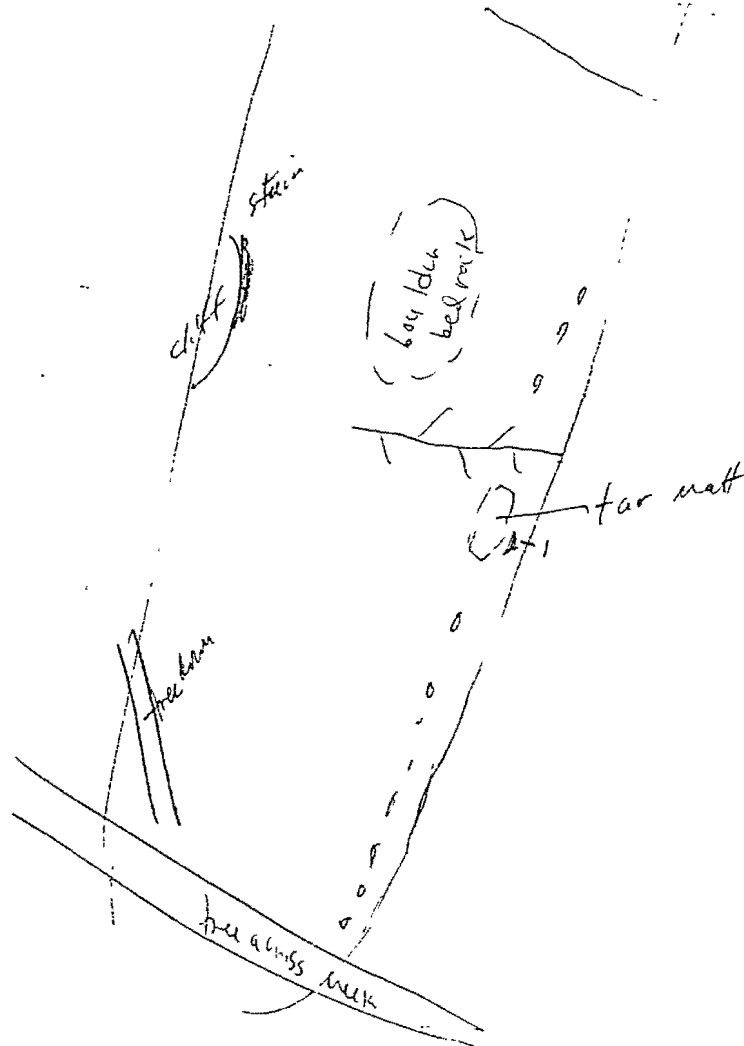
E(S)

DESCRIPTION

pit 1 - 8cm deep hole (1cm oil surface diam.)

Recommendations: If work crews are in the area, say Applegate Island perhaps 2 people and a shovel could run across and in 30 minutes or less remove the small amount of path is present.

No Bioremediation Necessary.

46 OIL DISTRIBUTION DIAGRAM

ASC NUMBER: _____ SEGMENT NUMBER: _____ YR CATALOGED: _____
 LOCATION: _____
 STREAM NAME: _____ LATITUDE: _____
 KODIAK K-UNIT: _____ LOCAL STREAM #: _____ LONGITUDE: _____
 USGS QUADRANGLE: _____ LEGAL: S
 SHORELINE TYPE: _____ ALL SEGMENTS: _____

ASC NUMBER: 24-20-12995
 SURVEY TYPE: _____
 METHOD: _____
 DATE: 4/28/90
 START TIME: _____
 STOP TIME: _____

TEAM RECORDER: _____
 OBSERVERS: _____

AGENCY(IES): _____

WAVE EXPOS: _____

PHOTOS TAKEN? _____
 Roll #: _____ Frames: _____
 VIDEO TAKEN? _____ Tape Number: _____
 Counter Start: _____

SAMPLES TAKEN?

SAMPLE I.D. NUMBERS: 1. _____ 2. _____ 3. _____
 4. _____ 5. _____ 6. _____

	LENGTH	WIDTH	M2	%	THICK	PEN	OIL TYPE
SITE 1	15	.5	.				AP/TB
SITE 2							ST/CT
SITE 3							
SITE 4							
SITE 5							

OVERALL OIL IMPACT: _____

OIL IN STREAM CHANNEL?

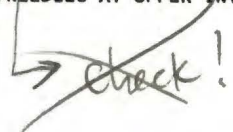
OIL ON BEACH WITHIN 50M OF STREAM MOUTH?

SUBSTRATE

Bedrock	Granule
Boulder	Sand
Cobble	Silt
Pebble	Veget.

SPECIES					
COUNT					

COMMENTS:

CATALOG NUMBER: 2242012995								SEGMENT#: CU001		LOCATION: CULROSS ISLAND, SOUTH TIP, FACING APPLGATE ISLAND	
DATE	SURVEY	SITE	W x L (m) SITE TYPE	PERCENT OIL	THICKNESS & PENETR. (cm)	OIL TYPES, DEPTH INTERVAL (cm)	SITE SPECIFIC COMMENTS				
04/13/90	PRE-ANADS CAT	1	.05 x 45 SURFACE			MS AP	NARROW BAND OF OILED MOUSSE, NEEDLES ON BANK IN UITZ.				
04/13/90	PRE-ANADS CAT	2	.05 x 10 SURFACE			MS AP	NARROW BAND OF OILED MOUSSE, NEEDLES ON BANK IN UITZ.				
MAD vs. OG: COMMENTS: NARROW BANDS OF OILED/MOUSSE/NEEDLES AT UPPER INTERTIDAL ON EACH BANK. RECOMMENDATIONS: SHOVEL/STEAM  											

CATALOG NUMBER: 2242012995								SEGMENT#: CU001		LOCATION: CULROSS ISLAND, SOUTH TIP, FACING APPLGATE ISLAND	
DATE	SURVEY	SITE	W x L (m) SITE TYPE	PERCENT OIL	THICKNESS & PENETR. (cm)	OIL TYPES, DEPTH INTERVAL (cm)	SITE SPECIFIC COMMENTS				
04/26/90	ANADSCAT	1	.5 x 15 SURFACE		1	AP TB	WEST SIDE: BROKEN TARMAT AND SPORADIC TAR PATTIES IN UITZ.				
04/26/90	ANADSCAT	2	SURFACE			ST CT	EAST SIDE: STAIN AND COAT ON CLIFFS IN UITZ.				
MAD vs. OG: COMMENTS: BROKEN TARMATS/SPORADIC PATTIES, UPPER INTERTIDAL RSFDS NEAR FALLEN SPRUCE. STAIN/SURFACE COATING ON LSFDS IN BEDROCK CLIFFS DOWNED LOG WITH NEEDLES. (0.25 SQ. METER OF TARBALL/PATTY). OIL ON STREAM BANKS. RECOMMENDATIONS: IF WORK CREWS ARE IN THE AREA, SAY APPLGATE ISLAND, PERHAPS 2 PEOPLE AND A SHOVEL COULD RUN ACROSS AND IN 30 MINUTES OR LESS REMOVE THE SMALL AMOUNT OF PATTIES PRESENT. NO BIOREMEDIATION NECESSARY.											

CATALOG NUMBER: 2242012995								SEGMENT#: CU001		LOCATION: CULROSS ISLAND, SOUTH TIP, FACING APPLGATE ISLAND	
DATE	SURVEY	SITE	W x L (m) SITE TYPE	PERCENT OIL	THICKNESS & PENETR. (cm)	OIL TYPES, DEPTH INTERVAL (cm)	SITE SPECIFIC COMMENTS				
04/26/90	OG'S ANADSCAT	1	.5 x 15 SURFACE		1	PT	WEST SIDE: SPORADIC PATTIES IN UITZ.				

04/26/90	OG'S ANADSCAT	2	.5 x .5 SURFACE			ST	EAST SIDE: SPORADIC STAIN IN UITS.
04/26/90	OG'S ANADSCAT	3	SURFACE			TP	WEST SIDE: SPORADIC TAR BALLS IN UITS CONTINUING ALONG BEACH TO OCEAN. (DFG ADDED SITE #).
MAD vs. OG: NO CONFLICTS COMMENTS:							

CATALOG NUMBER: 2242012995		SEGMENT#: CU001		LOCATION: CULROSS ISLAND, SOUTH TIP, FACING APPLGATE ISLAND			SEQ:
DATE	SURVEY	SITE	W x L (m) SITE TYPE	PERCENT OIL	THICKNESS & PENETR. (cm)	OIL TYPES, DEPTH INTERVAL(cm)	SITE SPECIFIC COMMENTS
04/13/90	PRE-ANADS CAT	1	.05 x 45 SURFACE			MS AP	to narrow band of oiled mousse, needles on bank in UITZ.
04/13/90	PRE-ANADS CAT	2	.05 x 10 SURFACE			MS AP	"
MAD vs. OG: COMMENTS: NARROW BANDS OF OILED/MOUSSE/NEEDLES AT UPPER INTERTIDAL ON EACH BANK. RECOMMENDATIONS: SHOVEL/STEAM							

CATALOG NUMBER: 2242012995		SEGMENT#: CU001		LOCATION: CULROSS ISLAND, SOUTH TIP, FACING APPLGATE ISLAND			SEQ:
DATE	SURVEY	SITE	W x L (m) SITE TYPE	PERCENT OIL	THICKNESS & PENETR. (cm)	OIL TYPES, DEPTH INTERVAL(cm)	SITE SPECIFIC COMMENTS
04/26/90	ANADSCAT	1	.5 x 15 SURFACE		1	AP TB	WEST SIDE: BROKEN TAR MAT AND SPORADIC PT IN UITZ. TAL PATTIES.
04/26/90	ANADSCAT	2	SURFACE			ST CT	EAST SIDE: STAIN AND COAT ON CLIFFS IN UITZ.
MAD vs. OG: COMMENTS: BROKEN TARMATS/SPORADIC PATTIES, UPPER INTERTIDAL RSFDS NEAR FALLEN SPRUCE. STAIN/SURFACE COATING ON LSFDS IN BEDROCK CLIFFS ^{DOWNED LOG} DOWN LOW WITH NEEDLES. (1/2-METER X 15 METER SPORADIC PATTY) (0.25 SQ. METER OF TARBALL/PATTY). OIL ON STREAM BANKS. RECOMMENDATIONS: IF WORK CREWS ARE IN THE AREA, SAY APPLGATE ISLAND, PERHAPS 2 PEOPLE AND A SHOVEL COULD RUN ACROSS AND IN 30 MINUTES OR LESS REMOVE THE SMALL AMOUNT OF PATTIES PRESENT. NO BIOREMEDIATION NECESSARY.							

CATALOG NUMBER: 2242012995		SEGMENT#: CU001		LOCATION: CULROSS ISLAND, SOUTH TIP, FACING APPLGATE ISLAND			SEQ:
DATE	SURVEY	SITE	W x L (m) SITE TYPE	PERCENT OIL	THICKNESS & PENETR. (cm)	OIL TYPES, DEPTH INTERVAL(cm)	SITE SPECIFIC COMMENTS
04/26/90	OG'S ANADSCAT	1	.5 x 15 SURFACE		1	PT	WEST SIDE OF STREAM & SPORADIC PATTIES in UITZ.

DATE PRINTED: 10/17/91

NON-DUCK STREAMS

PAGE 32

04/26/90	OG'S ANADSCAT	2	.5 x .5 SURFACE			ST	EAST SIDE OF STREAM - SPORADIC STAIN - UITS.
04/26/90	OG'S ANADSCAT	3	SURFACE			TP	WEST SIDE OF STREAM - SPORADIC TAR BALLS - UITS CONTINUING ALONG BEACH TO OCEAN. (DFG ADDED SITE #).
MAD vs. OG: NO CONFLICTS COMMENTS:							

CATALOG NUMBER: 2242012995

STREAM NAME:

LOCATION: CULROSS ISLAND, SOUTH TIP, FACING APPLGATE ISLAND

SEGMENT NUMBER: CU001

SHORELINE TYPE:

DATE: 04/13/90 TIME: COVE -1002

SITE	WIDTH (m)	LENGTH (m)	AREA (sqm)	PERCENT OIL	THICKNESS (cm)	PENETRATION (cm)	SURFACE SUBSURF	OIL TYPES	COMMENTS
1	.05	45					SURFACE	MS AP	
2	.05	10					SURFACE	MS AP	

COMMENTS:

NARROW BANDS OF OILED/MOUSSE/NEEDLES AT UPPER INTERTIDAL EACH BANK.

RECOMMENDATIONS: SHOVEL/STEAM

STREAM BANKS: YES

MILE OF STREAM: YES, UPPER INTERTIDAL

OIL ON
OIL WITHIN 1

CATALOG NUMBER: 2242012995

STREAM NAME:

LOCATION: CULROSS ISLAND, SOUTH TIP, FACING APPLGATE ISLAND

SEGMENT NUMBER: CU001

SHORELINE TYPE: *Cove*

DATE: 04/26/90 TIME: COVE -1055

SITE	WIDTH (m)	LENGTH (m)	AREA (sqm)	PERCENT OIL	THICKNESS (cm)	PENETRATION (cm)	SURFACE SUBSURF	OIL TYPES	COMMENTS
1	.5	15			<i>1cm</i>		SURFACE	AP TB	<i>- west side of stream - broken tarmat/sporadic pt - U11Z</i>
2							SURFACE	ST CT	<i>- east side of stream - stain/coat on cliffs - U11Z</i>

COMMENTS:

BROKEN TARMATS/SPORADIC PATTIES, UPPER INTERTIDAL RSFDS NEAR FALLEN SPRUCE. STAIN/SURFACE COATING ON LSFDS IN BEDROCK CLIFFS DOWN LOW WITH NEEDLES. (0.5 METER X 15 METER SPORADIC PATTY) (0.25 SQ. METER OF TARBALL/PATTY)

RECOMMENDATIONS: IF WORK CREWS ARE IN THE AREA, SAY APPLGATE ISLAND, PERHAPS 2 PEOPLE AND A SHOVEL COULD RUN ACROSS AND IN 30 MINUTES OR LESS REMOVE THE SMALL

AMOUNT OF PATTIES PRESENT. NO BIOREMEDIATION NECESSARY.

BANKS: YES

STREAM: YES

OIL ON STREAM
OIL WITHIN 1 MILE OF

ALASKA DEPT. OF
FISH & GAME

APR 30 1990

ANADSCAT 90

ADF&G MULTI-ASSESSMENT DATA FORM

1 SURVEY TYPE: BS SS DS TS AVS SCHA MMHS PTA

REGION II
HABITAT DIVISION

REGION: PWS KP, CI K, AP

METHOD: Aerial Ground Boat

3 DATE: 4-26-90

15 HIGH TIDE TIMES: 1

21 TEAM RECORDER: P. Gurti

4 START TIME: 10:25

16 HIGH TIDE HTS: 1

22 OBSERVERS: A. Wesman

5 STOP TIME: 10:55

17 LOW TIDE TIMES: 1

23 AGENCY: ADF&G

6 SEGMENT #: C4001

18 LOW TIDE HTS: 1

24 PHOTOS TAKEN: Y (N)

7 STATION #:

19 TIDE HT AT SURVEY:

Roll #: Frame:

8 K-UNIT:

Ebb Slack Flood Slack

25 VIDEO TAKEN: (N) TAPE#: 90AJW002.SSS

9 STAT AREA:

20 USCG QUAD: SC4

Start: 0649 End: 0760 0795

10 LAT:

11 LONG:

26 SAMPLES TAKEN? Y (N) Number

12 SOURCE: Map Loran

13 LOCATION: Culross I

14 DESCRIPTION: Se tip - across from Applegate I

Oil

Sediment

Biological

Water

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M ²	%	L	W	M ²	%
27 SURFACE COVERAGE				<u>23%</u>				<u>0</u>
28 SURFACE THICKNESS	<u>1cm</u>							
29 PENETRATION	<u>1-2cm</u>							

36 CATALOGED ANAD. FISH SREAM? (Y) N

37 CATALOG #: 224-20-12995

38 STREAM NAME:

39 OIL IN STREAM BED? Y (N)

40 OIL ON STREAM BANKS? (N)

41 OIL ON BEACH ADJACENT TO MOUTH? (N)
(within 50 meters)

42 OIL WITHIN 1 MILE OF STREAM? (Y) N

30 OVERALL OIL IMPACT: N (V) L M H

31 OIL TYPE: Pooled Houss far Asphalt Sticky Stain

32 OILED DEBRIS? (Y) N

Where:

33 SHORELINE TYPE: Headland Low-lying Rocks Beach Cqve
Lagoon Marsh

43 ANADROMOUS FISH PRESENT? Y N

34 WAVE EXPOSURE: High Moderate Low

44 ANADROMOUS FISH OBSERVATION
Species Aerial Ground

35 SUBSTRATE TYPE: Bedrock Boulder 5% Cobble 20%
Gravel 75% Sand Mud/silt

COMMENTS: Broken farmatts/sporadic patches upper intertidal RSEDS near failure
spruce stain/surface coating on LSEDS in bedrock cliffs down
low with needles

(1/2 meter x 15 meter sporadic patchy)

(0.25 sq meter of far bank patchy)

ACE 7236739+1S

CU001
224-20-12995

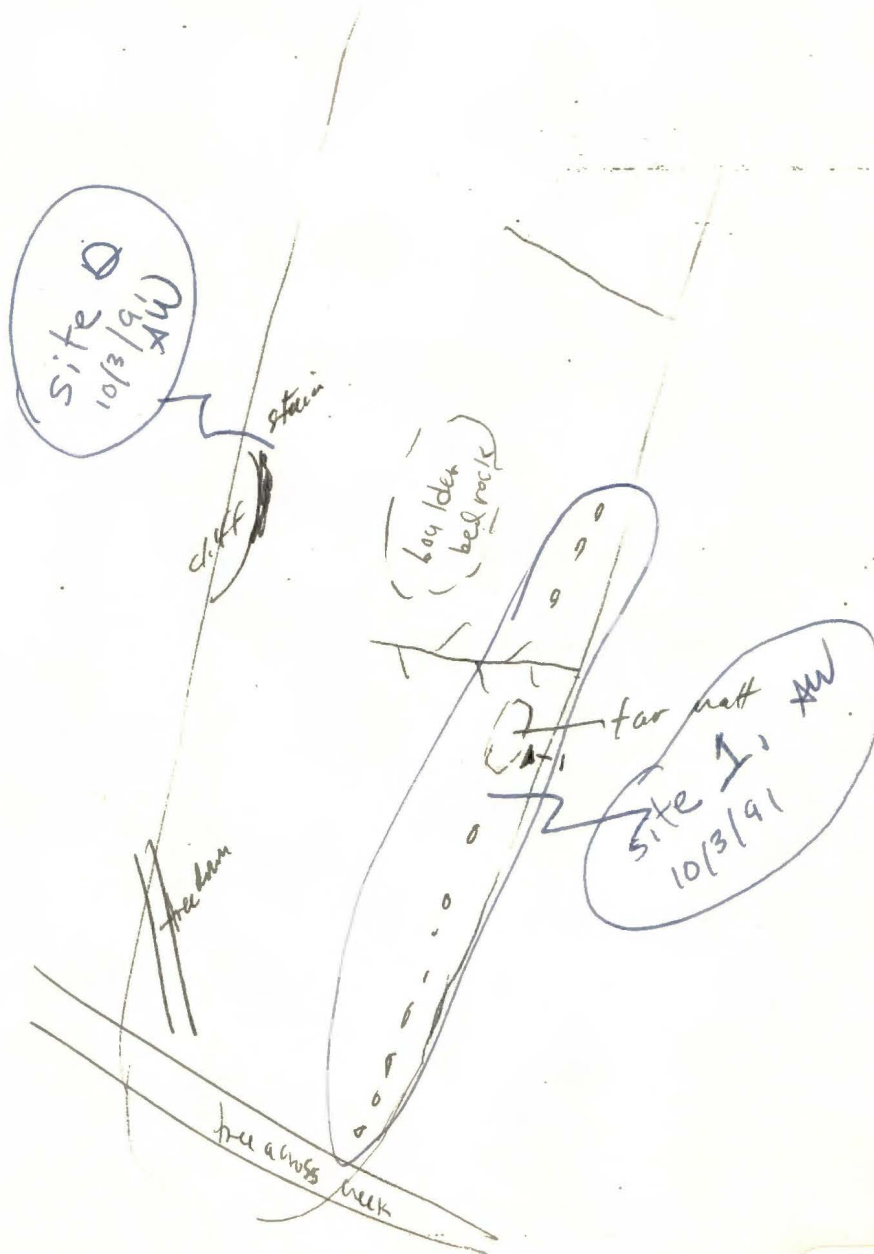
FRAME(S)

DESCRIPTION

pit 1 - 8cm deep hole (1cm oil surface diam.)

Recommendations: If work crews are in the area, say Applegate Island perhaps 2 people and a shovel could run across and in 30 minutes or less remove the small amount of path is present.

No Bioremediation Necessary.

46 OIL DISTRIBUTION DIAGRAM

16/
27

Seg ID: CU-001 Subdiv: 224-20-12995

Survey Date: 4/26/90

Comments by: Ken Critchlow

A line of scattered patties/asphalt pavement was present in a narrow band extending most of the length of the stream along the left side in the MITZ. Oil in this area was widely scattered and unlikely to be mobile. A small area of oil coating and stain was observed on the right side in the MITZ.

Oil observed at this site will probably weather slowly and is unlikely to be removed by storm activity due considerable shading of the banks and extremely low exposure to wave action, respectively. For this reason, it may be desirable to remove the patties/asphalt pavement. This would require perhaps 2 hours work by two persons using shovels and trowels.

KR Critchlow

SHORELINE OILING SUMMARY (ANAD)

REVISION NO. 04/13/90

OG CAL LARSON USCG DREHER, CWE SEGMENT ST/ C4001 13/27
 BIO KEN CRITCHLOW LAND REP STREAM 22A 20-1298 OF 1
 EXXON AL SNOOK ADFG 21K GUSTIN-AIMEE WESEMAN TIME 10:25 TO 10:55
 TEAM NO. 14 TIDE LEVEL 1 FT DATE 4/26/90
 EST. SUBDIVISION LENGTH: 50 m ☒ Sun ☐ Clouds ☐ Fog ☐ Rain ☐ Snow
 UPLANDS DESCRIPTION: ☐ Grass ☒ Forest ☐ Rock
 SURVEYED FROM: ☐ Foot ☐ Boat ☐ Helo
 SURFACE SEDIMENTS: R 0 % B 0 % C 40 % P 40 % G 20 % S 0 % M 0 % V 0 %
 SLOPE: Long 90 % Hang 0 % Vert 10 % WAVE EXPOSURE: ☒ Low ☐ Med ☐ High
 OIL CATEGORY LENGTH: W 0 m M 0 m N 0 m VL 15.5 m NO 34.5 m

SURFACE OIL

CHARACTER	DISTRIBUTION				OIL / FILM COLOR								IMPACTED ZONES			
	C	B	P	S	BR	BL	FW	GY	SL	DR	TL	LR	SU	U	M	L
ASPHALT PAVEMENT																
POOLED																
COVER																
COAT																
STAIN				✓		✓							✓			
MOUSSE																
PATTIES				✓		✓							✓			
TARBALLS				✓		✓							✓			
FILM																
NO OIL													✓		✓	✓

PAVEMENT H F S 0 sq. m by 0 cmPATTIES / TARBALLS 1/2 BAGSNEAR SHORE SHEEN? NO BR RW SL TL

OILED DEBRIS	AMOUNT		
	SM	MD	LG
Logs			
Vegetation			
Trash			
Debris			

Did you COLLECT

DEBRIS

☐ YES ☒ NO

TYPE

#BAGS

Photographs:

Roll No. 0Frames 0

SUBSURFACE OIL

PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER					OILED INTERVAL (CM-DM)	BELOW		OIL / FILM COLOR								PIT ZONE	A N A	SHEEN (Y/N)	SURFACE - SUBSURFACE SEDIMENTS
		OP	OR	OL	OF	NO		UO	UC	BR	BL	FW	GY	SL	DR	TL	LR				
1	8					✓												✓			CB PB GR CB PB GR

COMMENTS LONG POCKET COVE, RINGED BY TALL SPRUCE 1-5 METER CLIFF BORDERING COVE. BEACH SEDIMENT CONSISTING OF BROKEN SHALE. VERY LITTLE OILING AT THIS SITE

REVIEWED 0 DATE 0

ACE 7236743

11/27

OPERATIONS FIELD NOTES

See Back for Instructions

SEGMENT ID ST-CU-01-A
 STREAM ID # 224-20-12995
 ANNOTATED MAP INCLUDED Y(N)

DATE 4/26/90
 NAME Snook
 TEAM # 14

SURFACE OIL	Quantities in Meters			None	Bioremediation		Tilling		Spot Hot Water	
	Length	Width	Area		Y/N	% Treat	Y/N	% Treat	Y/N	% Treat
Wide Band										
Medium Band										
Narrow Band										
Very Light	0.5	0.5	0.25	✓	N		N		N	
TOTAL MANDAYS										

SUBSURFACE OIL

Other (Describe)? No SUBSURFACE OILING

TARMATS	Quantities in Meters			Treatment Rec		# of Bags	Mandays Required	
	Length	Width	Thick(cm)	None	Breakup/Remove		Breakup	Remove
Area #1	15	0.5	1	✓		1		0.5
Area #2								
Area #3								
Area #4								
Sporadic Mats								

MANUAL PICKUP	Type of Debris			In Meters		# of Bags	Pickup	Manday
	Mousse Tarballs	Oiled Veget	Cleanup Debris	Length	Width		Y/N	Estimate
"Pocket" #1								
"Pocket" #2								
"Pocket" #3								
Random/Continuous	✓			4 TARBALLS	1/10		N	1/10

OILED LOGS <u>Y(N)</u>	OILING <u>H/M/L</u>	QUANTITY <u>L/M/S</u>	BURN <u>Y/N</u>
------------------------	---------------------	-----------------------	-----------------

Is there Other Debris on the Beach? Y(N) How Many Bags? --- Is it mingled with the Oiled Debris Y(N)

GENERAL

Snow covering 0 % of the Supratidal Zone?

Wave Exposure H/M/L

Access Limitations: LOW ANGLE POCKET BEACH

Snare Boom/Pom Poms Recommended? No

Would the production Craft have to be relocated to complete work on this subdivision? Y(N) # of Times ---

COMMENTS:

NO TREATMENT RECOMMENDED.

ACE 7236744

ANAD
SSAT DATA ENTRY FORM

12/27
PAGE 1 OF 2

GENERAL DATA

SEG ID: CU-001 SUBDIV: 224-20
12995 TEAM: 14 SURVEY DATE: 4/26/90
PAVEMENT: CHAR — AREA — THICKNESS — TARBALLS X
OILED: LGS — VEG — TRH — DBR — WAVE EXP: LW X MD — HG —
FAX RCVD: — DT: — AGENCY DISAGREE: —
EST SUBDIV LGTH: 50 OIL CATEGORY: W — M — N — VL 15,5NO34,5U —

SURFACE DATA

SURFACE SEDIMENT: BRK — BLD — COB 40 PEB 40 GRN 20 SAN — MUD — VEG —

CHAR #: 1 OIL CHAR: ST OIL DIST: CONT — BRKN — PTCH — SPLH X
OIL CLR: DBL FILM CLR: RW TIDAL ZONE: SU — UI X MI — LI —

CHAR #: 2 OIL CHAR: PT OIL DIST: CONT — BRKN — PTCH — SPLH X
OIL CLR: DBL FILM CLR: RW TIDAL ZONE: SU — UI X MI — LI —

CHAR #: 3 OIL CHAR: TB OIL DIST: CONT — BRKN — PTCH — SPLH X
OIL CLR: DBL FILM CLR: RW TIDAL ZONE: SU — UI X MI — LI —

CHAR #: — OIL CHAR: — OIL DIST: CONT — BRKN — PTCH — SPLH —
OIL CLR: — FILM CLR: — TIDAL ZONE: SU — UI — MI — LI —

CHAR #: — OIL CHAR: — OIL DIST: CONT — BRKN — PTCH — SPLH —
OIL CLR: — FILM CLR: — TIDAL ZONE: SU — UI — MI — LI —

CHAR #: — OIL CHAR: — OIL DIST: CONT — BRKN — PTCH — SPLH —
OIL CLR: — FILM CLR: — TIDAL ZONE: SU — UI — MI — LI —

CHAR #: — OIL CHAR: — OIL DIST: CONT — BRKN — PTCH — SPLH —
OIL CLR: — FILM CLR: — TIDAL ZONE: SU — UI — MI — LI —

CHAR #: — OIL CHAR: — OIL DIST: CONT — BRKN — PTCH — SPLH —
OIL CLR: — FILM CLR: — TIDAL ZONE: SU — UI — MI — LI —

ACE 7236745

ANAD
SSAT DATA ENTRY FORM

13/
27

SUBSURFACE DATA

PAGE 2 OF 2

SEGMENT ID: CU-001 SUBDIV: 224-20
12995

PIT # 1 PIT DEPTH 8 OIL CHARACTER NO OIL INTVAL: FROM — TO —
QUANT: — OIL CLR: — FLM CLR: — ZONE: SU — UI X MI — LI —
SUBSURF SEDIMENT: BRK — BLD — COB X PEB X GRN X SAN — MUD — VEG —

PIT # — PIT DEPTH — OIL CHARACTER — OIL INTVAL: FROM — TO —
QUANT: — OIL CLR: — FLM CLR: — ZONE: SU — UI — MI — LI —
SUBSURF SEDIMENT: BRK — BLD — COB — PEB — GRN — SAN — MUD — VEG —

PIT # — PIT DEPTH — OIL CHARACTER — OIL INTVAL: FROM — TO —
QUANT: — OIL CLR: — FLM CLR: — ZONE: SU — UI — MI — LI —
SUBSURF SEDIMENT: BRK — BLD — COB — PEB — GRN — SAN — MUD — VEG —

PIT # — PIT DEPTH — OIL CHARACTER — OIL INTVAL: FROM — TO —
QUANT: — OIL CLR: — FLM CLR: — ZONE: SU — UI — MI — LI —
SUBSURF SEDIMENT: BRK — BLD — COB — PEB — GRN — SAN — MUD — VEG —

PIT # — PIT DEPTH — OIL CHARACTER — OIL INTVAL: FROM — TO —
QUANT: — OIL CLR: — FLM CLR: — ZONE: SU — UI — MI — LI —
SUBSURF SEDIMENT: BRK — BLD — COB — PEB — GRN — SAN — MUD — VEG —

PIT # — PIT DEPTH — OIL CHARACTER — OIL INTVAL: FROM — TO —
QUANT: — OIL CLR: — FLM CLR: — ZONE: SU — UI — MI — LI —
SUBSURF SEDIMENT: BRK — BLD — COB — PEB — GRN — SAN — MUD — VEG —

PIT # — PIT DEPTH — OIL CHARACTER — OIL INTVAL: FROM — TO —
QUANT: — OIL CLR: — FLM CLR: — ZONE: SU — UI — MI — LI —
SUBSURF SEDIMENT: BRK — BLD — COB — PEB — GRN — SAN — MUD — VEG —

PIT # — PIT DEPTH — OIL CHARACTER — OIL INTVAL: FROM — TO —
QUANT: — OIL CLR: — FLM CLR: — ZONE: SU — UI — MI — LI —
SUBSURF SEDIMENT: BRK — BLD — COB — PEB — GRN — SAN — MUD — VEG —

PROBLEMS: —

ACE 7236746

FIELD SHORELINE COMMENT SHEET

SEGMENT ST / CU-001 SUBDIVISION: ^{ASC#} 224-20-16280 DATE 26 APR 90

USCG

NAME Kerwin L. Dreher SIGNATURE CWO K. L. Dreher

☒ NO TREATMENT RECOMMENDED
COMMENTS

☐ TREATMENT SUGGESTED

should be labeled
stream#

224-20-12995

~~ADEC~~ → ADF&G

NAME Rick Gustin

SIGNATURE Richard Gustin

☐ NO TREATMENT RECOMMENDED
COMMENTS

☒ TREATMENT SUGGESTED

If work crews are in the area, say Applegate Fr., perhaps
2 people and a shovel could run across and in 20-30 minutes
or less remove the small amount of patties present.
No bioremediation necessary.

~~LAND MANAGER~~ → NONE

NAME Rick Gustin

SIGNATURE Richard Gustin

☐ NO TREATMENT RECOMMENDED
COMMENTS

☐ TREATMENT SUGGESTED

19/27

FIELD SHORELINE COMMENT SHEET

SEGMENT ST / CU-001 SUBDIVISION: ^{ASC#} 224-20-16280 DATE 26 APR 90

USCG

NAME Kerwin L. Dreher SIGNATURE CWO K. L. Dreher

☒ NO TREATMENT RECOMMENDED
COMMENTS

☐ TREATMENT SUGGESTED

~~ADEC~~ → ADF&G

NAME Rick Gustin

SIGNATURE

Richard Gustin

☐ NO TREATMENT RECOMMENDED
COMMENTS

☒ TREATMENT SUGGESTED

If work crews are in the area, say Applegate F., perhaps
2 people and a shovel could run across and in 20-30 minutes
or less remove the small amount of patties present.

No bioremediation necessary.

~~LAND MANAGER~~ → NONE

NAME Rick Gustin

SIGNATURE

Richard Gustin

☐ NO TREATMENT RECOMMENDED
COMMENTS

☐ TREATMENT SUGGESTED

ANADROMOUS FISH STREAM EVALUATION

extra copies
ANADSCATSEGMENT ST/ CU-01 STREAM NO: 224-20-12995 DATE 4/26/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

1A Salmon stream mouth - fry outmigration (3/1 to 5/15)
1B Salmon stream mouth - spawning (7/10 to 8/31)
6U Recreation: Tent sites (6/1 to 9/15)
6V Recreation: Anchorages (6/1 to 9/15)
6Y Recreation: Special use destination

See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:

Avoid any unnecessary disturbance or damage to unholed biota and substrate. Subject stream is located within Subdivision A (1 of 1).

ARCHAEOLOGICAL CONSTRAINT: If cultural resources are uncovered during shoreline treatment, stop work in the vicinity, mark the location of the find and contact Exxon's Cultural Resource Program immediately (564-3274 (Anchorage) or 229-1508 (24 hrs.)).

SHPO SIGNATURE: Laurel Jan Dan DATE: 5/18/90Subsurface Oil Observed: Yes No X Maximum Depth

RECOMMENDATIONS:

<u>E</u> No Treatment Recommended	<u> </u> Snare/Absorbent Booms
<u>X</u> Treatment Recommended	<u> </u> Oil Snare (pom poms)
<u>X</u> Manual Pickup	<u> </u> Absorbents (pads, rolls, etc)
<u> </u> Bioremediation	<u> </u> Spot Washing: <u> </u> Wands
<u> </u> Tarmat Removal	<u> </u> Beach Cleaner
	<u> </u> Other (see comments)

COMMENTS: TAG COMMENTS: MANUAL PICKUP OF TAR BALLS & PATTIES AS INDICATED
ON SKETCHTAG APPROVAL DATE: 5/9/90ADEC Art Weiner Art WeinerEXXON Arthur SealNOAA Burl Wescott Burl WescottUSCG D. D. Rome D. D. RomeFOSC: ML DATE: 5-23-90

*Processed
5/8/90
JW*

RECEIVED
MAY 05 1990

DEPT. OF
ENVIRONMENTAL CONSERVATION

ANADROMOUS FISH STREAM ASSESSMENT

REGION: PRINCE WILLIAM SOUND

SEGMENT: CU-01

STREAM NO: 224-20-12995

*REMOVE PATTIES AND TARBALLS
check SSAT for CU-01 treatment*

OK

See recommendation ACE 7236729

ANADROMOUS FISH STREAM EVALUATION

SEGMENT ST/ CU-01 STREAM NO: 224-20-12995 DATE 4/26/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

1A Salmon stream mouth - fry outmigration (3/1 to 5/15)
1B Salmon stream mouth - spawning (7/10 to 8/31)
6U Recreation: Tent sites (6/1 to 9/15)
6V Recreation: Anchorages (6/1 to 9/15)
6Y Recreation: Special use destination
See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:

Avoid any unnecessary disturbance or damage to uncoiled biota and substrate. Subject stream is located within Subdivision A (1 of 1).

ARCHAEOLOGICAL CONSTRAINTS:

If treatment is planned, a cultural resource evaluation is required prior to shoreline treatment.

SHPO SIGNATURE: _____ DATE: _____

Subsurface Oil Observed: Yes _____ No X Maximum Depth _____

RECOMMENDATIONS:

<u>X</u> No Treatment Recommended	_____ Snare/Absorbent Booms
_____ Treatment Recommended	_____ Oil Snares (pom poms)
_____ Manual Pickup	_____ Absorbents (pads, rolls, etc)
_____ Bioremediation	_____ Spot Washing: _____ Wands
_____ Tarmat Removal	_____ Beach Cleaner
	_____ Other (see comments)

COMMENTS: _____

TAG COMMENTS: _____

TAG APPROVAL DATE: _____

ADEC _____
EXXON _____
NOAA _____
USCG _____

FOSC: _____ DATE: _____

PWS, SEWARD AND HOMER ECOLOGICAL CONSTRAINTS

- 1A Salmon stream mouth - fry outmigration (3/1 to 5/15)
- 1B Salmon stream mouth - spawning (7/10 to 8/31)
No disturbance of stream bed or banks unless authorized by ADF&G. No beach flushing into stream drainage. No bioremediation or other chemical application within 100m of stream without authorization from ADF&G. No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inipol application, prior to at least July 1 unless authorized by ADF&G. Treatment which is not intrusive and which will not affect nearshore oil or toxicity levels, such as manual removal, can probably proceed without adherence to time constraints. In any case, contact ADF&G Habitat Division prior to treatment for consultation and/or permit application.
AGENCY CONTACT PERSON: ADF&G John Morison 267-2324
- 1C Salmon fry nursery area (4/31 to 7/31)
No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inipol application, prior to July 31 unless authorized by ADF&G. Treatment which will not affect nearshore oil or toxicity levels, such as manual or mechanical removal, can probably proceed without adherence to time constraints. Contact ADF&G prior to treatment for confirmation and advice.
AGENCY CONTACT PERSON: ADF&G Larry Peltz 424-3214
- 1D Esther Hatchery release (4/15 to 6/15)
- 1E Main Bay Hatchery release (4/20 to 6/15)
- 1F Sawmill Bay Hatchery release (4/15 to 6/1)
- 1G Cannery Creek Hatchery release (4/21 to 6/1)
- 1H Remote release site
No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inipol application, prior to at least July 1 unless authorized by ADF&G and/or PWS Aquaculture Association. Treatment which will not affect nearshore oil or toxicity levels, such as manual or mechanical removal, can probably proceed without adherence to time constraints. Contact ADF&G or PWS Aquaculture Association for confirmation and authorization.
AGENCY CONTACT PERSON: 1E ADF&G Larry Peltz 424-3214
1D 1F 1G PWS Aquaculture Association John McMillan or Bruce Suzumoto 424-7511
- 1I Gill net area (6/7 to 8/31)
- 1J Purse seine area (7/20 to 9/30)
- 1K Purse seine hook-off (7/20 to 9/30)
- 1L Set net sites (6/11 to 7/25)
Contact ADF&G for specific dates, locations and constraints. Restrict boat and air traffic to essential minimum. When set net sites are present (1L) restrict beach operations to essential minimum as authorized by ADF&G. If plans for treatment include methods such as hot water wash or Inipol application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.
AGENCY CONTACT PERSON: ADF&G James Brady 424-3212
- 2M Herring spawning (4/1 to 6/15)
Contact ADF&G for confirmation - dates and locations may vary. Restrict boat traffic to essential minimum. Avoid damage to unopened intertidal and subtidal algae and seagrass. If plans for treatment include methods such as hot water wash or Inipol application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.
AGENCY CONTACT PERSON: ADF&G Evelyn Biggs 424-3235
- 3N, 3P Harbor seal and sea lion pupping (5/15 to 7/1)
- 3O, 3Q Harbor seal and sea lion molting (8/15 to 9/15)
Restrict boat and air traffic to essential minimum. No personnel within 400m. Aircraft to maintain 800m horizontal and 300m vertical distance from haulouts. No application of Inipol within two weeks of arrival dates (work window at these sites is limited to 7/2 to 7/31).
Contact ADF&G and USFWS prior to treatment for confirmation.
AGENCY CONTACT PERSON: US National Marine Fisheries Service Steve Zimmerman 586-7235
ADF&G Don Calkins 267-2403
- 5R Seabird colony (5/1 to 9/1)
Restrict air and boat traffic to essential minimum. No personnel within 800m. Aircraft to maintain 800m horizontal, 300m vertical distance from colony. Contact USFWS prior to treatment.
AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377
- 5S Shorebird/waterfowl concentration (4/1 to 5/15)
Restrict all activity to essential minimum, especially air traffic. Contact USFWS and ADF&G for confirmation.
AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377
ADF&G Tom Roth 267-2206
- 5T All Bald Eagle nests (3/1 to 6/1)
Active Bald Eagle nests (3/1 to 9/1)
Restrict air traffic and all disturbance to essential minimum. No personnel within 400m 3/1 to 6/1. Air approach and takeoff from and to seaward only; maintain 800m horizontal, 300m vertical distance from nests. Contact USFWS prior to treatment for confirmation of dates.
AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377
- 6B Recreation: Tent sites (8/1 to 9/15)
- 6C Anchorages (8/1 to 9/15)
- 6W Forest Service cabins (8/1 to 9/15)
- 6X Lodge (8/1 to 9/15)
- 6Y Special use destination
- 7Z Subsistence area: Salmon harvesting (5/1 to 9/30)
- 7HH Finfish harvesting
- 7II Deer harvesting (8/15 to 2/28)
- 7JJ Invertebrate harvesting
Contact ADF&G and appropriate Native Corporation for specific dates, locations, and constraints. Restrict boat and air traffic and beach disturbance to essential minimum. If plans for treatment include methods such as hot water wash or application of Inipol which might affect intertidal or nearshore oil or toxicity levels, contact ADF&G and appropriate Native Corporation for authorization - see Native Corporation Contact List for each Native Corporation's contact person.
AGENCY CONTACT PERSON: ADF&G Jim Fall 267-2359

ACE 7236731

FIELD SHORELINE COMMENT SHEET **DRAFT**

4/27

224-20-12945

SEGMENT ST 1 CU-001 SUBDIVISION: 224-20-16280 DATE 26 APR 90

USCG

NAME Kerwin L. Drehan SIGNATURE CWO K. L. Drehan

☒ NO TREATMENT RECOMMENDED
COMMENTS

☐ TREATMENT SUGGESTED

~~ADEQ~~ **ADF/G**

NAME Rick Gustin SIGNATURE Richard Gustin

☐ NO TREATMENT RECOMMENDED
COMMENTS

☒ TREATMENT SUGGESTED

If work crews are in the area, say Applegate F., perhaps 2 people and a shovel could run across and in 20-30 minutes or less remove the small amount of patten present.
No bioremediation necessary.

~~LAND MANAGER~~ **NAME**

NAME Rick Gustin SIGNATURE Richard Gustin

☐ NO TREATMENT RECOMMENDED
COMMENTS

☐ TREATMENT SUGGESTED

OG CAL LARSON USCG DREHER, CWE SEGMENT ST/ C4001 14/2
 BIO REN CRITCHMAN LAND REP STREAM 229 20-1274 OF
 EXXON AL-SNOOK ADFG RAK KANTON-AMEE WEZEMAN TIME ID 25 10/0:25
 TEAM NO. 78 TIDE LEVEL 1 FT DATE 4/26/90
 EST. SUBDIVISION LENGTH: 50 m ☒ Sun ☐ Clouds ☐ Fog ☐ Rain ☐ Snow
 UPLANDS DESCRIPTION: ☐ Grass ☒ Forest ☐ Rock
 SURVEYED FROM: ☐ Foot ☐ Boat ☐ Helo
 SURFACE SEDIMENTS: R 0 % S 0 % C 40 % P 40 % G 20 % S 0 % M 0 % V 0
 SLOPE: Long 10 % Hang 0 % Ver 10 % WAVE EXPOSURE: ☒ Low ☐ Med ☐ High
 OIL CATEGORY LENGTH: W 0 m M 0 m N 0 m VL 15.5 m NO 34.5

SURFACE OIL

CHARACTER	DISTRIBUTION				OIL / FILM COLOR					IMPACTED ZONES			
	N	S	E	W	1	2	3	4	5	SU	M	W	U
ASPHALT PAVEMENT													
POOLED													
COVER													
COAT													
STAIN					✓				✓			✓	
MOUSSE													
PATTIES					✓				✓			✓	
TARBALLS					✓				✓			✓	
FILM													
NO OIL										✓		✓	✓

PAVEMENT H F S 0 sq. m by 0

PATTIES / TARBALLS 1/2 BA

NEAR SHORE SHEEN? ☒ NO BR RW SL 1

OILED DEBRIS	AMOUNT		
	SM	MD	LG
Logs			
Vegetation			
Trash			
Debris			

Did You Coll
DEBRIS
☐ YES ☒ NO

TYPE 0

#BAGS 0

Photographs:

Roll No. 0

Frames 0

SUBSURFACE OIL

PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER					OILED INTERVAL	BELOW		OIL / FILM COLOR					PIT ZONE				A N A	OIL SHEEN (Y/N)	V	SURFACE SUBSURFACE SEDIMENT
		CP	CR	CL	CP	NO		NO	NO	1	2	3	4	5	SU	M	W	U				
1	8					✓	0								✓							CB 100 g CB 100 g

COMMENTS LONG ROCKY CORNER, BOUNDED BY TALL SPRUCE 4-5 METER CLIFF BOUNDING
CORNER. SURFACE SEDIMENT CONSISTING OF BROWN SILT. VERY LITTLE OILING
AT THIS SITE

REVIEWED JW

DATE 4-29-90

IN SEGMENT ST/6001

STREAM 224-20-12995

DATE 4/26 90

- ___ N Area
- ___ Approx. Depth
- ___ Sed/Bed Study
- ___ Of Dist.
- ___ Width
- ___ Length
- ___ % Cover
- ___ Substrate Character
- ___ Est. HABITAT
- ___ SFL
- ___ Profile Location(s)
- ___ Profile(s)
- ___ Pl Location(s)
- ___ Photo Location(s)

1 Δ
FR - No Subsurface Oil

Fig - Subroutine C0

CT/C
Continental Distribution

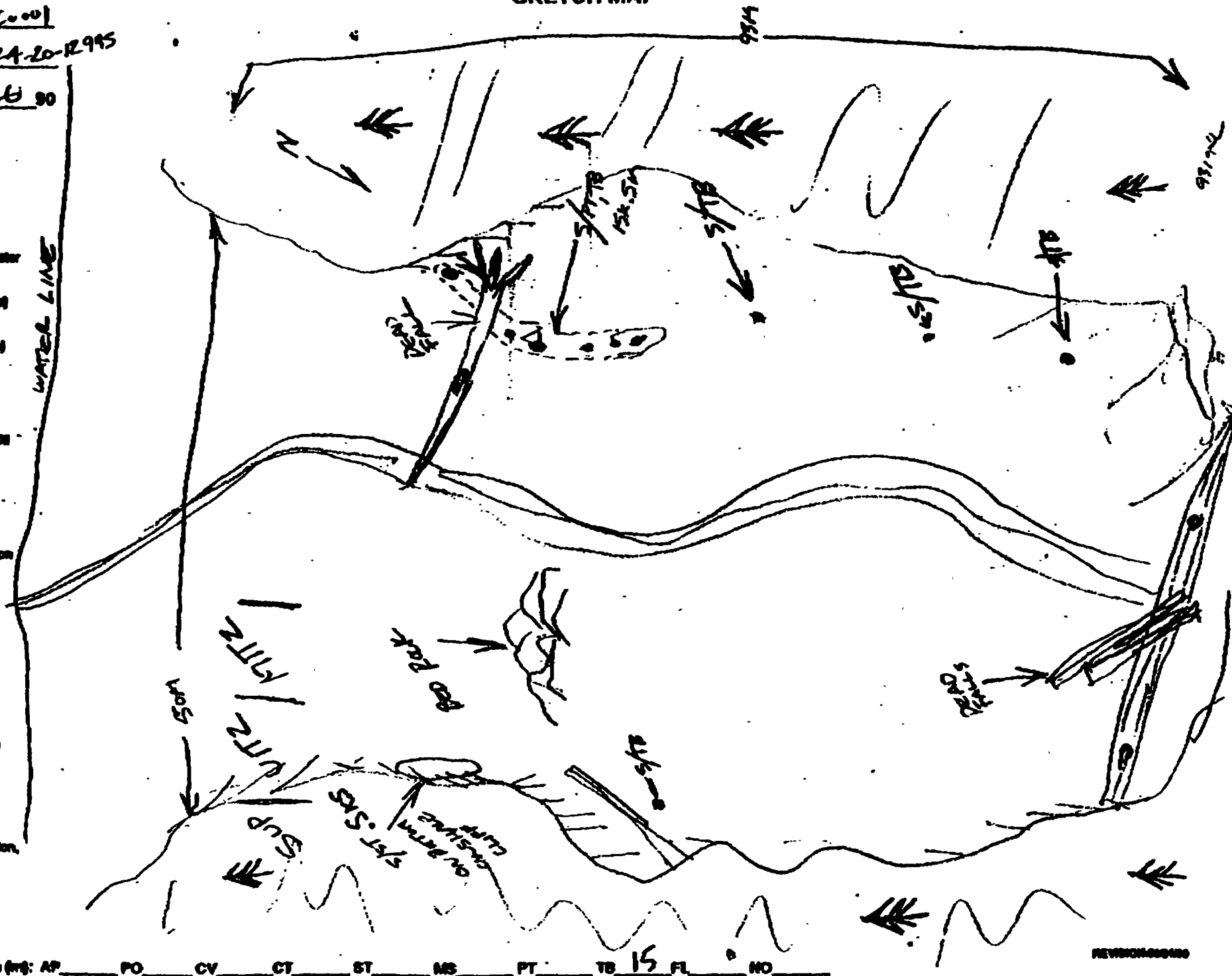
CT/B
Eastern Distribution

CT/P
Ready Distribution

Special Distribution

Old Vegetation

1 ➡
Photo location, direction,
and number



Character Length (in): AP PO CV CT ST MS PT TB 15 FL NO

ACE 7236734

Seg ID: CU-001 Subdiv: 224-20-12995

Survey Date: 4/26/90

Comments by: Ken Critchlow

A line of scattered potties/asphalt pavement was present in a narrow band extending most of the length of the stream along the left side in the U1TZ. Oil in this area was widely scattered and unlikely to be mobile. A small area of oil coating and stain was observed on the right side in the M1TZ.

Oil observed at this site will probably weather slowly and is unlikely to be removed by storm activity due considerable shading of the banks and extremely low exposure to wave action, respectively. For this reason, it may be desirable to remove the potties/asphalt pavement. This would require perhaps 2 hours work by two persons using shovels and trowels.

KR Critchlow

CU-2

SUSPECT AMERICAN ESCAPE
224-20-14-15
(P. 1/51)

ISLAND

CU-1
A-101

EXTREME EAST

SEGMENT : CU-1
SUBDIVISION : A-1 of 1

Excluded
Net

ACE 7236736

ADPEC MULTI-ASSESSMENT DATA FORM

1 SURVEY TYPE: BS SS TS AYS SCH MMS PTA2 REGION: PR KP, CI K, APMETHOD: Aerial Ground Boat3 DATE: 4-26-9015 HIGH TIDE TIMES: 121 TEAM RECORDER: P. Buta4 START TIME: 10:2516 HIGH TIDE HTS: 122 OBSERVERS: A. Wesman5 STOP TIME: 10:5517 LOW TIDE TIMES: 123 AGENCY: ADEX6 SECTID #: CU 00118 LOW TIDE HTS: 124 PHOTOS TAKEN: Y (N)

7 STATION #:

19 TIDE HT AT SURVEY:

Roll #: Frame:

8 K-UNIT:

Edh Slack Flood Slack

25 VIDEO TAKEN: 0 N TAPES: 90 AJW 00

9 STAT AREA:

20 USCG QUAD: SC4Start: 0649 End: 0700 07

10 LAT:

11 LONG:

26 SAMPLES TAKEN: Y (N) Number:12 SOURCE: Map Loran

Oil

13 LOCATION: Culross I.

Sediment

14 DESCRIPTION: Se. tip - across from Applegate I

Biological

Water

EXTENT OF OIL

	SHORELINE				STREAM			
	L	N	N	N	L	N	N	N
27 SURFACE COVERAGE				23%				0
28 SURFACE THICKNESS	1cm							
29 PENETRATION	1-2cm							

30 OVERALL OIL IMPACT: N (N) L N N35 CATALOGED ANAD. FISH BREAST (N) N31 OIL TYPE: Pooled Wax Oil Asphalt Sticky Stain37 CATALOG #1 224-20-1299532 OILED DEBRIS: (N) N

38 STREAM NAME:

33 SHORELINE TYPE: Hardland Low-lying Rocks Beach Cave
Lagoon Marsh39 OIL IN STREAM BED? Y (N)34 WAVE EXPOSURE: High Moderate (Low)40 OIL ON STREAM BANKS? (N) N35 SUBSTRATE TYPE: Bedrock Boulder 5% Gravel 75% Sand Mud/silt41 OIL ON BEACH ADJACENT TO MOUTH? (N) N
(within 50 meters)42 OIL WITHIN 1 MILE OF STREAM? (N) N

Where:

43 ANADROMOUS FISH PRESENT? Y N

44 ANADROMOUS FISH OBSERVATION
Species Aerial Ground

Species	Aerial	Ground

COMMENTS: broken tar mats / sporadic patches upper intertidal RSEDS area fallen
spume stain / surface coating on LSEDS in harbor closer down
for rock needles
(1/2 meter x 15 meter sporadic patchy) (0.25 sq. meter of tar mat / patch)

ACE 7236737

FRAME(S)

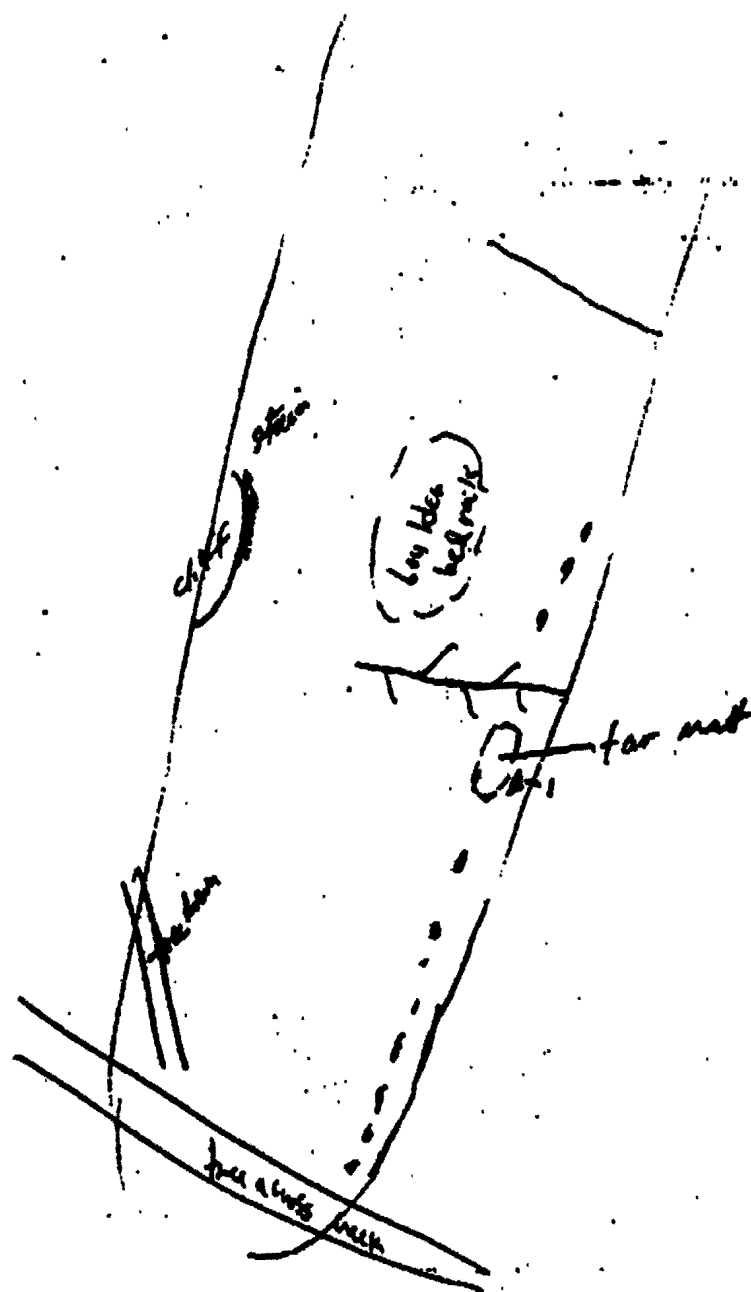
DESCRIPTION

pit 2 - 8cm deep hole (1cm oil surface diam.)

Recommendations: The work seems to be on the edge, say Antelope Island perhaps 2 people and a shovel could run across and in 20 minutes or less remove the small amount of pollution present.

No Remedial Action Necessary

48 OIL DISTRIBUTION DIAGRAM



Sample taken
Photo frame 8 and
shot direction.

ACE 7236738-15

Final Anadromous Stream Treatment Information

Segment ID - Stream ID	NTR	Bio	Bio Start	Bio End	Man	Man Start	Man End
BA002 226-40-16450	X						
BA002 226-40-16451		X	6/22/90	6/23/90	X	6/22/90	6/23/90
BP004 226-20-16388					X	7/1/90	7/2/90
BP004 226-20-16392					X	7/2/90	7/3/90
BP004 226-20-16395					X	7/3/90	7/4/90
BP004 226-20-16397		X	7/7/90	8/27/90	X	7/4/90	7/7/90
CB003 242-20-10190					X	6/14/90	6/14/90
CH001 226-20-16280					X	6/16/90	6/16/90
CH002 226-20-16180		X	7/3/90	9/12/90	X	6/16/90	6/16/90
CH009 226-20-16182		X	7/4/90	9/12/90	X	7/4/90	7/4/90
CH014 226-20-16255					X	6/20/90	6/20/90
CH016 226-20-16258	X						
CH0900 226-20-16200					X	7/3/90	7/3/90
CU001 224-20-12995					X	5/18/90	5/23/90
CU007 224-20-13010	X						
CU013 224-20-13030					X	6/3/90	6/3/90
CU014 224-20-13034					X	6/21/90	6/21/90
CU014 224-20-13036					X	6/21/90	6/21/90
EI001 242-10-10270					X	7/1/90	7/1/90
EL015 226-10-16906					X	6/30/90	6/30/90
EL052 226-10-16902		X	6/28/90	9/4/90			
ER005 226-50-16432					X	6/21/90	6/21/90
ER006 226-50-16430					X	6/20/90	6/20/90
ER007 226-50-16428					X	6/20/90	6/20/90
ER019 226-50-16406	X						
EV003 226-40-16590					X	6/10/90	6/10/90
EV007 226-40-16559	X						
EV012 EV012-UNCAT		X	6/22/90	6/23/90	X	6/22/90	6/23/90
EV014 226-40-16640					X	6/23/90	6/23/90
EV017 226-40-16620					X	6/19/90	6/19/90
EV017 226-40-16630					X	6/19/90	6/19/90
EV025 226-40-16613		X	7/1/90	7/1/90	X	6/9/90	6/9/90
EV027 226-40-16610					X	7/8/90	7/8/90
EV070 226-40-16509		X	6/12/90	9/1/90	X	6/12/90	6/12/90
EV071 226-40-16484		X	7/5/90	9/1/90	X	6/21/90	6/21/90
FL002 226-40-16390	X						
FL005 226-40-16400	X						
GR007 GR007-UNCAT					X	6/27/90	6/27/90
GR013 227-20-17890	X						
GR103 227-20-17880					X	6/24/90	6/26/90
IN031 226-10-16916					X	7/5/90	7/5/90
K0101-SI008 251-81-10010	X						
K0101-SI014 251-82-10090					X	7/3/90	7/3/90
K0112-SS009 251-50-10045					X	7/2/90	7/2/90
K0201-SI013 251-81-812	X						
K0302-IB005 252-31-10020					X	6/5/90	6/5/90
K0911-CD018 262-10-10100					X	7/5/90	7/7/90
K0911-CD020 262-10-10040					X	7/3/90	7/8/90
K0911-CD020 262-10-10070	X						



OFFICIAL PHOTOGRAPH 12995

ADEC

Culross Island

Time: _____

Location (segment #) Culross Island

Reason for taking photo: Squeeze Creek
Under salmon spawning stream.
Aerial intertidal

Taken by: Rick Gustin

Roll #: 89R16010

Frame #: 4

ACE 7236723

7



OFFICIAL PHOTOGRAPH

ADEC

Date: 10/11/89 Time: _____

Location (segment #): Culross Island

Reason for taking photo: Dog Squeeze Creek
Under salmon spawning stream.
Aerial intertidal

Taken by: Rick Gustin

Roll #: 89R13010 Frame #: 4

ACE 7236723

7

To: Alaska Department of Environment Conservation
Oil Spill Response Center
Anchorage, Alaska

Attn: John Bauer
FAX 265-4666

From: Steven Blank (please print)

RE: SEGMENT NUMBER CU-1 SUBSEGMENT NUMBER A

ADEC REP Steven Blank

USCG REP Mike Zenone

EXXON REP Al Snook

BOAT NAME/SQUAD NUMBER Don Bollinger

Site #	Length (along shore ft)	Area sq. ft.	Inipol (gallons)	Custombln (lbs.)
1	19	133	0	27
2	60	360	0	74
3	40	160	0	33

Has work been completed as stated on the work order? If your answer is no please explain in detail how the work performed was different from the work order language.

Yes, work has been completed as stated on the work order.

Describe the amount of oil remaining (type, size of area and location).

There is some OF in the MIT2 and UIT2.

Additional Comments (keep objective)

This is a retreated beach.

Signature Steven Blank

Date and time of demobilization from segment 8-2-90

Shoremon/Demob. LSO 55/30/90

ADEC DEMOBILIZATION REPORT FOR INIPOL AND CUSTOMBLEN TREATMENT

To: Alaska Department of Environmental Conservation
Oil Spill Response Center
Anchorage, Alaska

Attn: John Bauer
FAX 265-4666

From: Steven Blank (please print)

RE: SEGMENT NUMBER CU-01 SUBSEGMENT NUMBER A

ADEC REP Steven Blank USCG REP Dan Percy

EXXON REP Al Snook BOAT NAME/SQUAD NUMBER Dan Bollinger

Site #	Length (along shore m)	Area m ²	Inipol (gallons)	Customblen (lbs.)
1	24	72	0	15
2-1	35	105	0	22
2-2	25	125	0	25
3	47	188	0	39

Has work been completed as stated on the work order? If your answer is no please explain in detail how the work performed was different from the work order language.

Yes, work has been completed as stated on the work order to the best of my knowledge.

Describe the amount of oil remaining (type, size of area and location).

There was some OF subsurface oil in the UITZ and this is what was treated with Customblen.

Additional Comments (keep objective)

No comments

signature

Steven Blank

Date and time of demobilization from segment 6-13-90 3:30 pm

Shoremon\Demob.bio 55/30/90

ACE 7236725-15

Aimee Weseman
ADFG-Oil Spill Response
M/V Corinthian, PWS

June 8, 1990

Re: Stream Report
ASC# 224-20-12995 CU001 south east Culross Island

Treatment occurred to this lightly oiled anadromous fish stream on May 22. I accompanied Randy Boyer Exxon, Scott Rainsford USCG, Donald Montie OOPS, Marsha Martin ADEC, and Jeff Ginalias ADEC to the stream site to locate the oil. We encountered such a small amount of oil that we decided to pick it up ourselves. We removed approximately 1 gallon of tar patty/oiled gravel. A sporadic oil film remained. No further treatment is suggested at this time.

Aimee Weseman

Page of

Date May 22 Time 1800-1830

Operator/Contractor: _____

Representing

We skiffed to the stream to assess for treatment. The amount of oil was so small that we were able to pick it up. - It amounted to approx a gallon.

Pertinent Statutes/Regulations:

Recommended/Required Action (Specify):

Stream treatment completed. Small amounts of residual oil noticeable. No bio recommended.

By (date) _____ (if applicable)

Please note: This is not a final inspection report. It is intended to provide the operator/contractor with a notice of problems or concerns which require immediate attention. If necessary, a final inspection report will be issued at a subsequent date.

Gimmee Weseman Fish & Wildlife Tech.
Fish and Game Representative/Title Company Representative/Title

(version 5/02/89)

SHORELINE CLEANUP PROGRAM

DATE 6/03/89

SHORELINE SEGMENT CU-1

LOCATION: (see enclosed map) Culross Island-Southern Point

ADEC NO. _____ SHORELINE ASSESSMENT DATE: 5/28/89

Recommended Cleanup Activity(ies):

- Manually remove localized deposits of oiled drift including seaweed and logs.
- Use appropriate methods to clean the light coatings of oil which occur in pebble/cobble storm berms and in the upper intertidal zone.

Priorities Considerations:

Class 4A

Ecological Constraints (from site survey): Intergravel/interp healthy mussel beds should not be dislodged/disturbed. If cleaning efforts are attempted in the segment, precautions should be made to protect the mussel beds and the uncontaminated middle intertidal zone, lower intertidal zone and eelgrass beds. Eastern border, although light to moderately contaminated, is adjacent to estuary and healthy mussel beds. This area may not benefit from disturbance caused by cleanup activities.

Archeological Constraints (from site survey):

No access to uplands inside the treeline. If heretofore undiscovered cultural materials are uncovered during cleanup, contact Exxon's Archeological Field Director and take actions prescribed in the Operational Guidelines for Shoreline Cleanup dated 4/21/89 as amended.

Charles R. Johnson
State Historic Preservation Officer *

Date: June 7, 1989

ISCC:

EXXON: _____

Date: _____

FOSC: _____

Date: _____

Exxon needs
to develop
"appropriate
methods"

equired to satisfy stipulations in Alaska DNR

ACE 7236761+15

DOCUMENTATION:

Map/Aerial photo marking segment boundaries _____

VTR: Y/N Tape Number(s) _____

Photography: Y/N Roll Number(s) _____

Sample Numbers Collected: 1002 _____

ACE 7236762

CULROSS ISLAND
MAY 28/99

SEGMENT
ISLAND 1

CR 1

COMMENTS

This section of coast consists of two small rocky islands. The area between the islands and between the nearshore island and Culross Island is formed by low angle pebble/granule/cobble/mud beaches with extensive mussel beds. The rocky headlands generally fall directly into the sea although short sections with boulder/cobble veneers occur on the north side of the nearshore island.

The rocky headlands generally have a light coating of *for* at the extreme upper limit of the range for *Popwee* [*Fucus*]. ~~Small~~ Very small areas of moderate *for* accumulation occur in sheltered crevices. The upper ^{to shore edge} ITZ, on the low angle ~~beaches~~ generally have a 1 to 2 m wide barrier of light ~~coating~~ the pebbles and cobbles which occur in this area. In some areas this coating can be up to 6 m wide.

Insufficient oil occurs on the rocky headlands to justify cleaning given the value of the adjacent healthy biota. Areas of beach could be cleared if

can't over

appropriate technology is available to minimize disturbance to lower unaltered sections of the I.T.Z. which contain extensive mussel beds. The amount of oil which would be recovered from these beaches is however very small. It would be desirable to remove the localized deposits of contaminated seaweed and other drift. The volume of ~~the~~ such material on this portion of coastline is however again small.

SHORELINE OIL EVALUATION

MIKE MILES O.G

PATTY CRANK

MAY 23/89

Date: _____ / Time: 13:15

Observer: RICK REANIER

Surveyed From: Foot/Boat/Helio/PlaneWeather: Sun/Cloud/Rain/Snow/Fo

LOCATION

RAINING HARD

LOCATION CULROSS ISLANDSEGMENT NUMBER CR 1LENGTH OF SHORELINE SEGMENT: 1600 m

BEACH/HEADLAND

ACCESS: Foot/Vehicle/Boat/Barge/Helio/Float Plane

TOTAL SEGMENT 3050

SHORELINE:

on floats or at low water

Shoreline Type: SPI/BEA/COV/HLD/STRTSlope: LANG/HANG/VERWave Exposure: High/Med/Lowoccasionally
working Reo-
or mudSediment: B20 % / C10 % / P20 % / G % / S % / M % / R50 %Drift Debris on Beach: Yes/NoSupra/Upper/Mid/Lower Type logs and
drifted seaweed

OIL

Degree of Oiling: Heavy/Moderate/Light/No Oil/UnobservedArea of Beach Impact: SU / SP / H / M / L0.3 to 1.5m vertically on steep
1 to 6m wide on beachesContinuous: Y/N % of Segment 75

Width of Band: _____ m

Sporadic: Y/N % of Segment 10Est. Oil Thickness where > 1cm: N/A cmEst. Oil Penetration: ≤30 on _____ cmPooled Oil: 0 % "Free" Oil: 0 % Coated: H0 % / M<1 % / L60 %Fresh 0 % Mousse 0 % Tar Formation: 40 %Drift Debris Oiled? Yes/No Supra/Upper/Mid/Lower Amount: H/M/L

Comments:

Survey done in pouring rain and light oil contamination
is difficult to detect.See attached comment sheet.

CULROSS ISLAND
MAY 28 / 89

SEGMENT ^UCR 1
BEACH / HEADLAND 1

COMMENTS

(containing cobble / pebble / coarse
beachs)

This portion of coast consists of rocky headland interspersed with narrow coves, a small estuary and a lagoon / ~~area~~ sheltered low angle embayment.

Light oil deposits occur on the south or south-west exposed sections of cobble beach. Little or no oil occurs on east facing sections of beach.

A light to moderate coatings of oil and tar occur on the west facing beach on the east end of this segment. Localized light coatings of oil occur on the vegetation and mud in the north end of the lagoon.

It might be worthwhile to clean the contaminated sections of ~~pebble~~ / cobble beach if appropriate technology is available to prevent oil from contaminating the lower I.T.Z. or the adjacent estuary and mussel beds. However given the biological values in this area, clean-up activities may do more harm than good.
(has the potential to)

ECOLOGICAL EVALUATION

7-8

Patty Frank
Mike Frank
Rick Reimer (Chief)

LOCATION: Culross Island SITE: island 1 OBSERVER: Patty Frank, Mike Frank, Rick Reimer
 LOCATION PREFIX: CKU SEG. NO.: CK1 LENGTH: 1450 (M)
 DATE: 5/28/89 TIME (HHMM): 1215 TIDE HT.: below Fucus zone (M)

OILED ZONE: Splash High Medium Low

SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud

LIVE BIOTA

Fucus (algae): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

lightly contaminated in H1T2 with pockets of moderate oiling.

Mytilus (Mussels): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Extensive ^{healthy} intergravel beds. Areas on rocky headland have 20-70% mortality.

Balanus (Barnacles): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Moderately contaminated in areas absent of Fucus - Dominate fauna species on rocky headlands

Littorina

Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Limpets: Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

OTHER OBSERVATIONS: Spotty mousse deposits in rocky headland cracks and crevices.

CLEANUP PRECAUTIONS: Insufficient contamination to justify disturbance of intergravel mussel beds. If cleaned, uncontaminated MITZ - LITZ should be protected against contamination.

MAMMALS: Otters — Harbor Seals 1 Sea Lions — Whales —
 Other —

BIRDS: —

GENERAL OBSERVATIONS: —

ECOLOGICAL EVALUATION

LOCATION: Culross Island SITE: Beach 1 OBSERVER: B. Gank (Bobby's)
 LOCATION PREFIX: CU SEG. NO.: 01 LENGTH: 1100 (M)
 DATE: 5/28/89 TIME (HHMM): 1330 TIDE HT.: _____ (M)

OILED ZONE: Splash High Medium Low

SUBSTRATUM: Rocks Boulder Cobble Gravel Sand Mud Reef

LIVE BIOTA

Fucus (algae): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Mytilus (Mussels): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

Extensive ^{continuous} intergravel, interpeat beds, patchy on rocky heads

Balanus (Barnacles): Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

1/2 m. band of moderate oiling - contaminating Balanus in upper HITZ and splash zones.

Littorina

Patchy Y/N Contin. Y/N Dense Y/N ^{Moderate} Sparse Y/N None Y/N

Pockets of moderate congregations of Littorina.

Limpets: Patchy Y/N Contin. Y/N Dense Y/N Sparse Y/N None Y/N

OTHER OBSERVATIONS: ^{Uncontaminated} eelgrass bed. Small stream on beach.

CLEANUP PRECAUTIONS: Attempts should be made not to dislodge or contaminate intergravel, interpeat mussel beds. Protect uncontaminated MITZ & LITZ

MAMMALS: Otters scat Harbor Seals — Sea Lions — Whales —
 Other Deer

BIRDS: _____

GENERAL OBSERVATIONS: _____

(version of 4/29/89)

CULTURAL RESOURCE EVALUATION

Date 5-28-89 Location Cross Island Site

Location Prefix CRU Segment # CR-1 Length 3050 m

Survey Method:

Air ✓ (A - indicate on map) Boat ✓ (A - indicate on map)
Ground ✓ (G - indicate on map)

Known cultural resources (AHRS #) SEW-060 Data Source ANCSA 1416

Oil conditions/beach visibility light to no oil / good visibility

Width of beach zone surveyed 0-20 m Tree fringe surveyed 0-50

Cultural resources observed in beach zone (AHRS code) NONE

Cultural resources observed in tree fringe (AHRS code) CMT

General observations justifying survey method and segment's site probability

Shore Profile High angle pebble to boulder beach / rocky near

Fresh Water Sources A stream of seepage into the sand at margin

Sea Exposure Open to south, sheltered by Aniakchak Island

Access/Safety Easy access / no safety considerations

Probability of undiscovered sites in beach zone (circle one) 1 2 3 4 5

Monitoring during cleanup needed yes/no no Collection yes/no no

Photos: Color Roll # T4 A/C-2 Frames 15 & 16

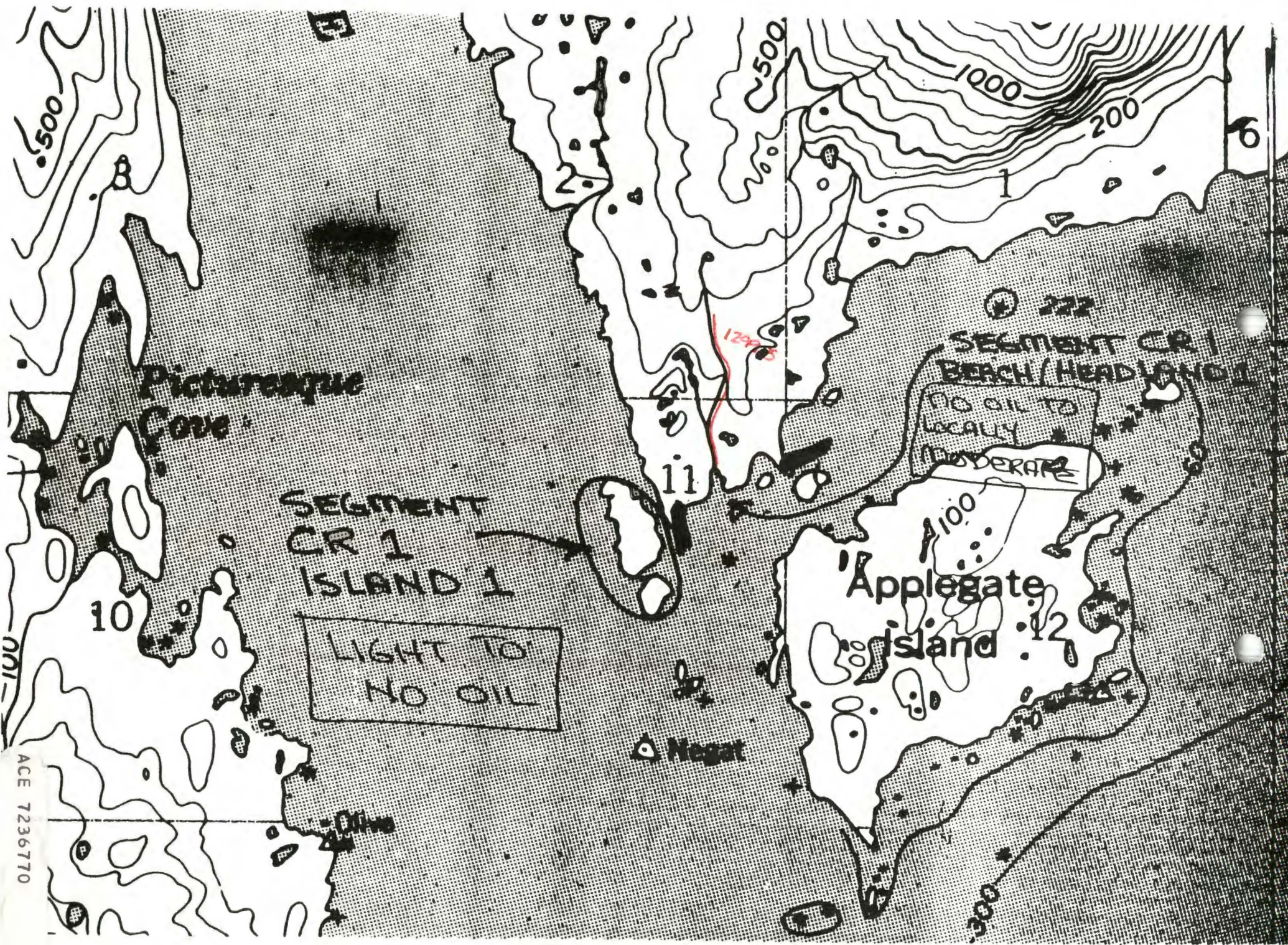
B/W Roll # Frames

Observer(s) R. Reardon

Time survey started 1400 Time survey ended

Cultural resource considerations/restraints:

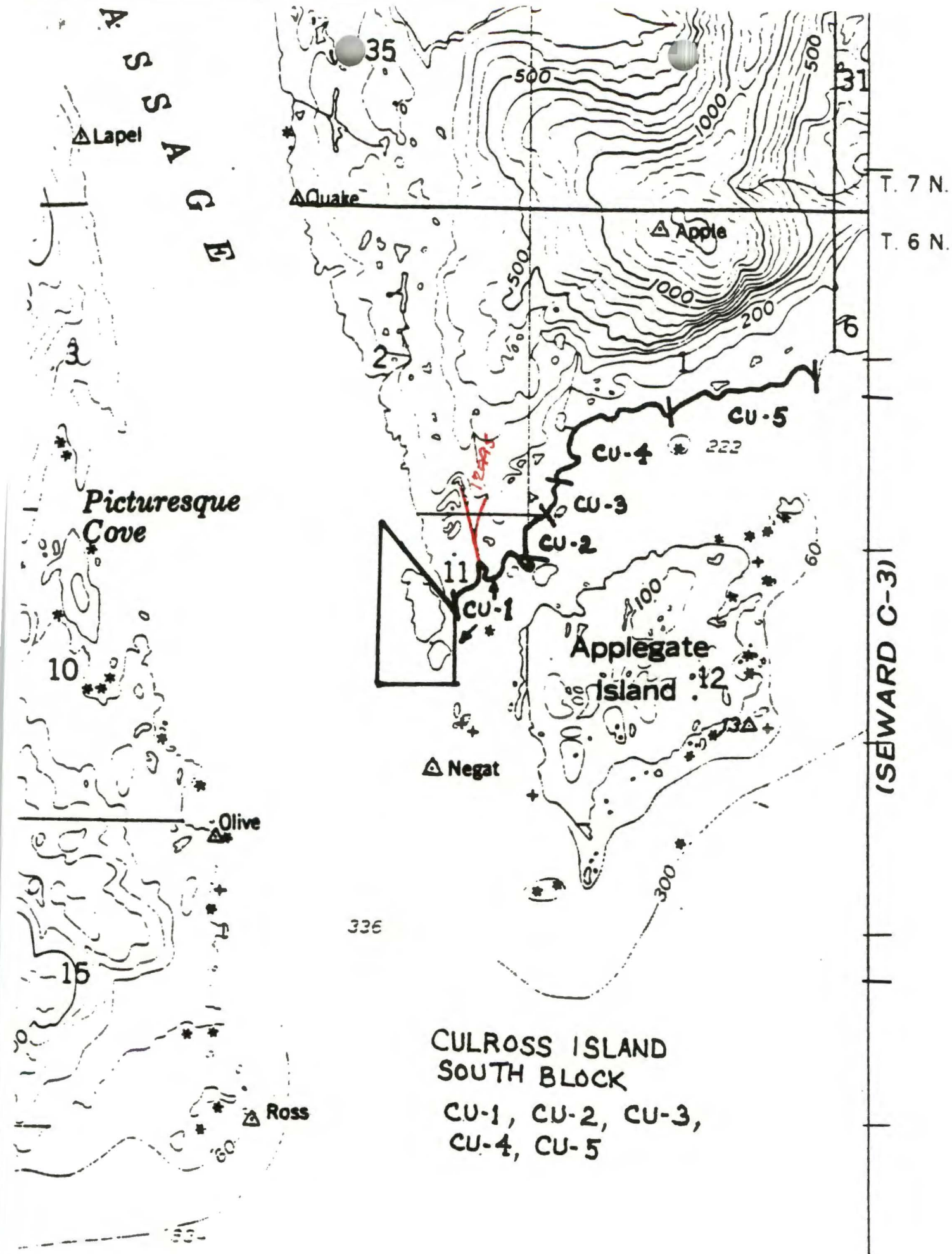
Cleanup security personnel will insure that no workers
climb on the rocky headland at the east end of this
segment because a USFS Antiquities Act warning
sign is posted here



ACE 7236770

CHIL DACE ISLAND

SEGMENT CR 1



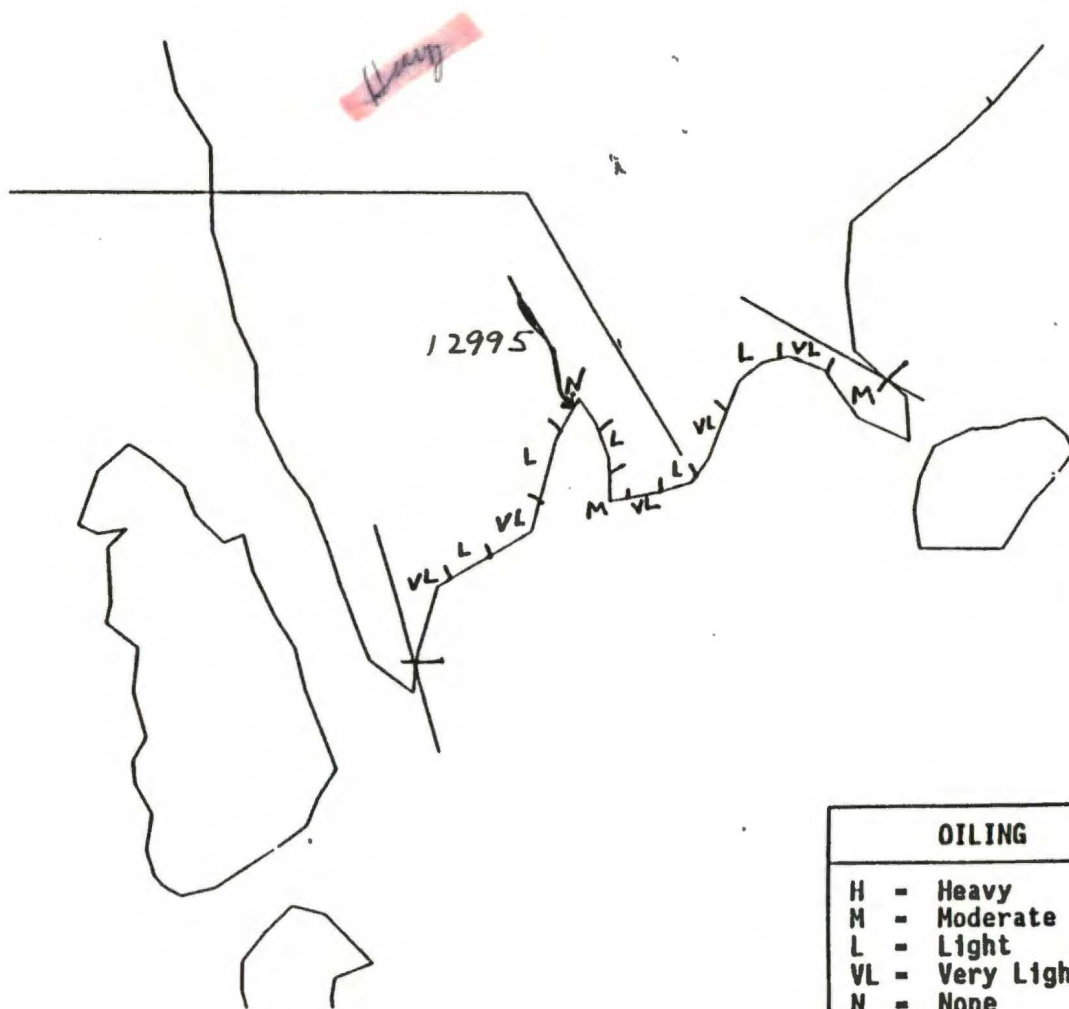
CULROSS ISLAND
SOUTH BLOCK
CU-1, CU-2, CU-3,
CU-4, CU-5

CU0001

500.0

ACE 7236772

-12/10/17



OILING	
H	Heavy
M	Moderate
L	Light
VL	Very Light
N	None
NS	Not Surveyed
Distance In Meters	

N

ADEC EXXON VALDEZ POST-TREATMENT SURVEY REPORT

SEGMENT#: CU001
LOCATION: S CULROSS ISLAND

DATE: 09/13/89
TIME: 15:30

Survey Type: Boat, Ground
Team: B. McCready

WEATHER AND SEA CONDITIONS

Weather: Sunny
Sea State: Calm

Wind Direction: E
Knots: 0-15

Low Tide: 6:40	Feet: -0.3	High Tide: 13:01	Feet: 11.1
Low Tide: 18:47	Feet: 2.09	High Tide: 0:01	Feet: 12.2

SHORELINE DESCRIPTION

Shoretypes: H,LR,B,C
(H=headland, LR=low-lying rock, B=beach, C=cove, L=lagoon, M=marsh)

Wave Exposure: M,L (H=high, M=moderate, L=low)
Shoreline Composition: R,B,C,G,S
(R=bedrock, B=boulder, C=cobble, G=gravel, S=sand, M=silt)

OIL CHARACTERISTICS

Degree of Oiling: N,VL,L,M
(N=none, VL=very light, L=Light, M=moderate, H=heavy)
Area of Impact: H,M
(S=supratidal, H=high intertidal, M=mid tidal, L=low intertidal)

Max. Oil Thickness: 1 mm (1 = 1 mm or less, 0 = no oil)
Max. Oil Penetration: 20 cm (35 = 35 cm or greater)

Percent Segment Categorized as Oiled: 100%
Presence of Oiled Driftwood (y/n): n
Oil Types: T,ST
(P=pooled, M=mousse, SY=sticky, T=tar, A=asphalt, ST=stain)
Samples: CU001-1 / CU001-2 / none / none

DAMAGED OR OILED ORGANISMS

Fucus (y/n): n Barnacles (y/n): n Mussels (y/n): n
Dead Mammals: 0 Dead Birds: 0

SOLID WASTE FOUND

Type: None
Bags Collected: 0

Draft

Printed: 12/12/89 11:04

Walk-a-thon

ACE 7236720

*Processed
4/24
RAH*

RECEIVED

APR 21 1990

DEPT. OF
ENVIRONMENTAL CONSERVATION

REGION: PRINCE WILLIAM SOUND

SEGMENT: ST/CU-01

SUBDIVISIONS: A (1 OF 1)

*Cancer & Bird
Habitat
Project*

ACE 7236749 +15

SHORELINE EVALUATION

SEGMENT ST/ CU-01 SUBDIVISION A (1 OF 1) DATE 4/4/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

Salmon stream mouth (no. 12995)

1A Salmon stream mouth - fry outmigration (3/1 to 5/15)

1B Salmon stream mouth - spawning (7/10 to 8/31)

6U Recreation: Tent sites (6/1 to 9/15)

6V Recreation: Anchorages (6/1 to 9/15)

6Y Recreation: Special use destination

See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:

Avoid disturbance/damage to uncoiled biota and substrate.

ARCHAEOLOGICAL CONSTRAINTS:

If cultural resources are uncovered during shoreline treatment, stop work in the vicinity, mark the location of the find and contact a member of Exxon's Cultural Resource Program immediately (564-3657; 564-3658 or 564-3276).

SHPO SIGNATURE: _____ DATE: _____

OILING CATEGORIZATION:

Wide 0 m: Medium 193 m: Narrow 237 m: V.Light 1560 m: No Oil 0 m
Subsurface Oil Observed: Yes X No _____ Maximum Depth 17 cm

RECOMMENDATIONS:

☐ No Treatment Recommended	☐ Snare/Absorbent Booms
☒ Treatment Recommended	☐ Oil Snares (pom poms)
☒ Manual Pickup	☐ Absorbents (pads, rolls, etc)
☒ Bioremediation	☐ Spot Washing: _____ Wands
☒ Tarmat: _____ Breakup	☐ Beach Cleaner
☒ Removal	☐ Other (see comments)

COMMENTS: The recommended treatment activities are as follows: 1) Manual pick up of debris, 2) Removal of tarmat and, 3) Bioremediation of areas shown on attached sketch map. Treatment activities should be conducted between 5/15 and 7/10 based on above salmon constraints, unless approved by ADF&G.

TAG COMMENTS:

TAG APPROVAL DATE: _____

ADEC _____

EXXON _____

NOAA _____

USCG _____

FOSC: _____ DATE: _____

ACE 7236750

PWS ECOLOGICAL CONSTRAINTS

- 1A Salmon stream mouth - fry outmigration (3/1 to 5/15)
1B Salmon stream mouth - spawning (7/10 to 8/31)
No disturbance of stream bed or banks unless authorized by ADF&G. No beach flushing into stream drainage. No bioremediation or other chemical application within 100m of stream. Contact ADF&G Habitat Division prior to treatment for permits.
- 1C Salmon fry nursery area (4/31 to 7/31)
- 1D Esther Hatchery release (4/15 to 6/1)
- 1E Main Bay Hatchery release (4/20 to 5/10)
- 1F Sawmill Bay Hatchery release (4/20 to 5/10)
- 1G Cannery Creek Hatchery release (4/21 to 6/1)
- 1H Remote release site
- 1I Gill net area (6/7 to 8/31)
- 1J Purse seine area (7/21 to 9/30)
- 1K Purse seine hook-off (7/20 to 9/30)
- 1L Set net sites (6/11 to 7/25)
For Codes 1C through 1L contact ADF&G for specific dates, locations and constraints.
- 2M Herring spawning (4/1 to 6/15)
Restrict boat traffic to essential minimum. Avoid damage to unholed intertidal and subtidal algae and seagrass. Contact ADF&G for specific dates and locations.
- 3N, 3P Harbor seal and sea lion pupping (5/15 to 7/1)
3O, 3Q Harbor seal and sea lion molting (8/15 to 9/15)
Restrict boat and air traffic to essential minimum. No personnel within 400m. Aircraft to maintain 800m horizontal and 300m vertical distance from haulouts.
- 5R Seabird colony (5/1 to 9/1)
Restrict air traffic to essential minimum. No personnel within 800m. Aircraft to maintain 800m horizontal, 300m vertical distance. Contact ADF&G and USFWS prior to treatment.
- 5S Shorebird/waterfowl concentration (4/1 to 5/15)
Restrict all activity to essential minimum, especially air traffic.
- 5T All Bald Eagle nests (3/1 to 6/1)
Active Bald Eagle nests (3/1 to 9/1)
Restrict air traffic to essential minimum. No personnel within 400m 3/1 to 6/1. Air approach and takeoff from and to seaward only; maintain 800m horizontal, 300m vertical distance from nests. Contact USFWS prior to treatment for confirmation of dates.
- 6U Recreation: Tent sites (8/1 to 9/15)
- 6V Anchorages (8/1 to 9/15)
- 6W Forest Service cabins (8/1 to 9/15)
- 6X Lodge (8/1 to 9/15)
- 6Y Special use destination
- 7Z Subsistence area: Salmon harvesting (5/1 to 9/30)
- 7HH Finfish harvesting
- 7II Deer harvesting (8/15 to 2/28)
- 7JJ Invertebrate harvesting
For Codes 7Z through 7JJ contact ADF&G and Chenega Corporation for specific dates, locations, and constraints.

FIELD SHORELINE COMMENT SHEET

SEGMENT ST / CU-01 SUBDIVISION: A-1 of 1 DATE 04/04/00

USCG

NAME David S. Thomas

SIGNATURE [Signature]

☐ NO TREATMENT RECOMMENDED
COMMENTS

☒ TREATMENT SUGGESTED

ADEC

NAME Clara Crosby

SIGNATURE [Signature]

☐ NO TREATMENT RECOMMENDED
COMMENTS

☒ TREATMENT SUGGESTED

Manual removal of mats - If Bioremediation
is considered at this site - oiling
should be Broken ^(PIT #2) up or killed - Very Poor
energy area - to 17m.

LAND MANAGER

NAME MARSHA MARTIN / DNR

SIGNATURE [Signature]

☐ NO TREATMENT RECOMMENDED
COMMENTS

☒ TREATMENT SUGGESTED

Did not observe the
outlying islands with
Exxon & USCG Reps.

SHORELINE OILING SUMMARY

REVISION NO. 03/22/90

OG Rick Gillie USCG BM 1 Thomas SEGMENT ST/ CU-01
 BIO DAVE Lohr LAND REP Marsha Martin SUBDIVISION A, 1 of 1
 EXXON FRANK ADEC Clara Crosby (ADNR) TIME 18:00 to 19:30
 TEAM NO.: 13 TIDE LEVEL: +3 16 +5 DATE 04/04/90
 EST. SUBDIVISION LENGTH: 286 m ☐ Sun ☒ Clouds ☐ Fog ☒ Rain ☐ Snow
 UPLANDS DESCRIPTION: ☒ Grass ☒ Forest ☒ Rock
 SURVEYED FROM: ☒ Foot ☐ Boat ☐ Helo WORKING DIRECTION: E to W
 SURFACE SEDIMENTS: R 30 % B 10 % C 20 % P 40 % G 0 % S 0 % M 0 % V 0 %
 SLOPE: Lang 40 % Hang 30 % Vert 20 % WAVE EXPOSURE: ☐ Low ☒ Med ☐ High
 OIL CATEGORY LENGTH: W 0 m M 100 m N 400 m VL 2316 m NO 0 m

SURFACE OIL

CHARACTER	DISTRIBUTION				OIL / FILM COLOR								IMPACTED ZONES			
	IC	IS	IP	IS	BR	BL	GR	OR	OW	SL	TL	TR	SU	UI	MI	U
ASPHALT PAVEMENT	X					X								X		
POOLED																
COVER																
COAT		X	✓		X										X	
STAIN																
MOUSSE																
PATTIES				X				X						X		
TARBALLS				X				X						X		
FILM	X		✓			X								X		
NO OIL																X

PAVEMENT: H F (S) 100 sq. m by 4 cmPATTIES / TARBALLS 0.5 BAGSNEAR SHORE SHEEN? NO BR RW SL TL

OILED DEBRIS	AMOUNT		
	SM	MD	LG
Logs			
Vegetation			
Trash	X		
Debris			

DEBRIS COLLECTED
☐ YES ☒ NO

TYPE _____

#BAGS _____

Photographs:

Roll No. ST-13-2Frames 21-24

SUBSURFACE OIL

PIT NO.	PIT DEPTH (cm)	SUBSURFACE OIL CHARACTER					OILED INTERVAL (CM-CH)	BELOW		OIL / FILM COLOR								PIT ZONE				A N A	SUBSURFACE SEDIMENTS
		OP	OR	OL	OF	NO		UO	UC	BR	BL	GR	OR	OW	SL	TL	TR	SU	UI	MI	U		
1	30					X	-												X				P, G, C
* 2	15			X			2-8	X	X											X			P, G, SM
3	20	X					7-17	X	X										X				P, M
4	20					X	-												X				P, G
							.																
							.																

* OILED INTERVAL (5 CM IN PIT NO. 2 DOES NOT CONSTITUTE SUBSURFACE OIL COMMENTS

O OILING - AP/C DESIGNATED ALONG APPROX. 100M OF SITE 1 AREA. ALSO SUBSURFACE OIL TO DEPTH OF 17 CM.

- OTHERWISE, CT/S AND AP/S.

SHORELINE ECOLOGICAL SUMMARY

REVISION: 03/22/90

Segment ST / Wool Subdivision A Date (mo / day / yr) 4-4-90

Time (24 hr) 18:00 Biologist David Cohen

(A) Substrate type and % of segments:
(1) Bedrock 30 (2) Boulder 10 (3) Cobble 20 (4) Pebble 40 (5) Sand (6) Silt

(B) Overall % cover of biota (% of segment): Dense 15 Moderate 25 Low 60

(C) Density, substrate preference (by number from A, above), & vertical zonation of major taxa: (upper-U; mid-M; low tidal-L); juveniles / adults (X), new settlement (3)

Photographs:
Roll No. ST-13-2

Frames 21-24

BARNACLES

Dense			Moderate			Sparse			Rare		
1U	1M	1L	1U	1M	1L	1U	1M	1L	1U	1M	1L
2	2	2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6	6	6	6	6

NOT PRESENT

MYTILUS

Dense			Moderate			Sparse			Rare		
1U	1M	1L	1U	1M	1L	1U	1M	1L	1U	1M	1L
2	2	2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6	6	6	6	6

NOT PRESENT

GASTROPODS

Dense			Moderate			Sparse			Rare		
1U	1M	1L	1U	1M	1L	1U	1M	1L	1U	1M	1L
2	2	2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6	6	6	6	6

NOT PRESENT

FUCUS

Dense			Moderate			Sparse			Rare		
1U	1M	1L	1U	1M	1L	1U	1M	1L	1U	1M	1L
2	2	2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6	6	6	6	6

NOT PRESENT

Wildlife Observations/ General Comments:

See page 2

Ecological Considerations:

6U, 6V, 6Y - no comment

1B - One running stream located in segment - oil present in area of stream mouth

1. Moderate to dense mussels in mid-intertidal cobble would be susceptible to foot traffic / disturbances.

ACE 7236754

Segment ST-CU001

Subdivision A

4-4-90

Biologist - David Lohse

Wildlife Observations/General Comments

1. present in mid-intertidal: Enteromorpha, Nueella, Ulva, Ectocarpus, Cladophora
unidentified "branching" red algae
2. One sea lion spotted in area
3. In mid-intertidal cobble/pebble mussel mortality reaches 50%
in some areas. Overall mortality is ~10%.
4. deer skeleton found above high tide line. No oil observed.
5. Lots of drift Fuws washed up on beach at one location. H₂S present
6. low intertidal not sampled due to tidal level

DATE 04, 04 90

CHECKLIST

_____ N Arrow
 _____ Approx. Scale
 _____ Seg/Sub Entry
 _____ On Dist.
 _____ Width
 _____ Length
 _____ % Cover
 _____ Substrate Character
 _____ Est. HMLAWL
 _____ SSL
 _____ Profile Location(s)
 _____ Profile(s)
 _____ PH Location(s)
 _____ Photo Location(s)

LEGEND

1 Δ
Plt - No Subsurface Oil

2 ▲
Plt - Subsurface Oil

CT/C
Continuous Distribution

CT/B

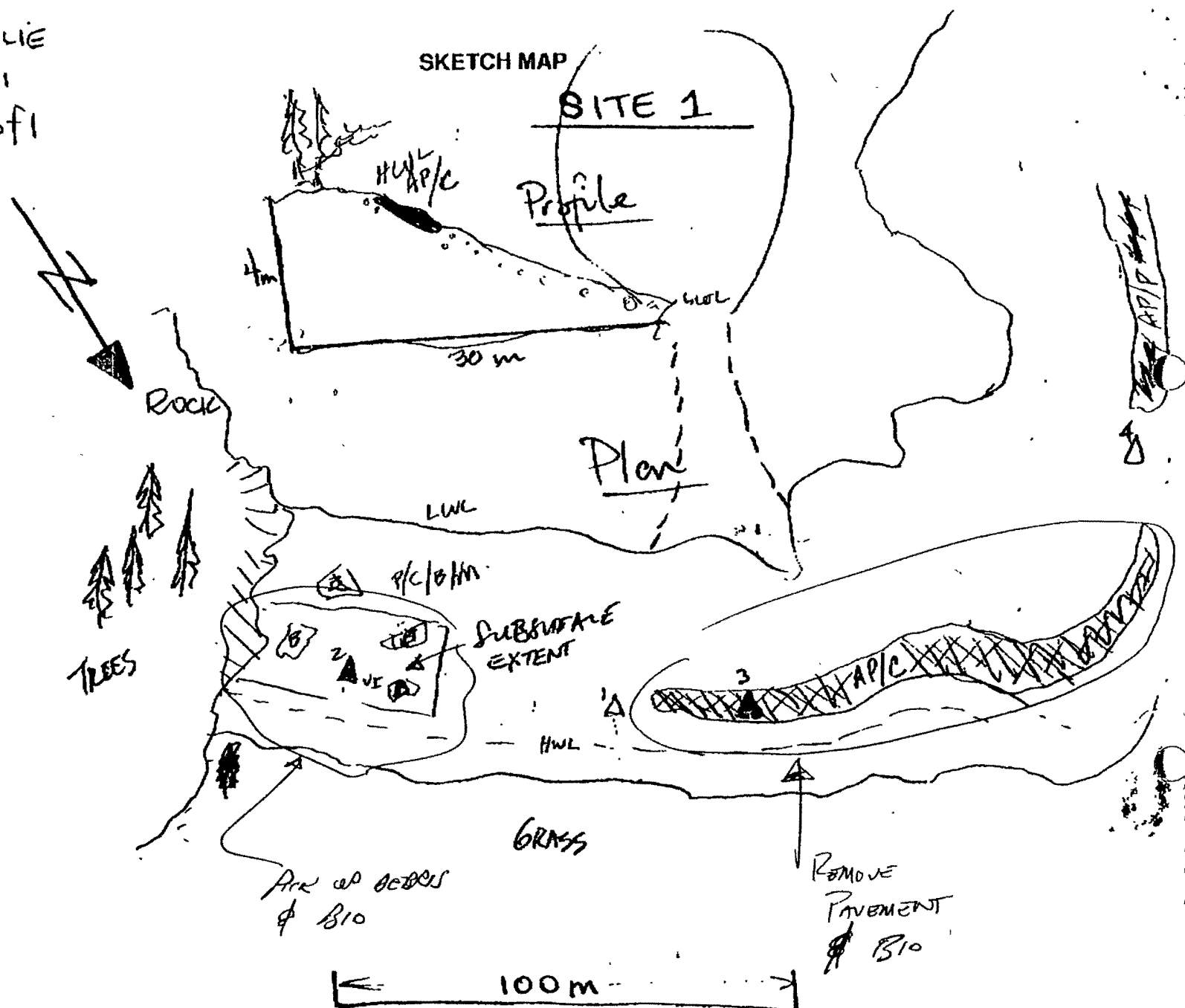
Broken Distribution

[CT/P]
Patchy Distribution

CT/S
Splashed Distribution

Old Vegetation

1 
Photo location, direction,
and number



ACE 7236756

On Character Length (log) AP PO CV CL ST MS PT TB FL NO

REVISION: 01/24/76

OG RICK GILLIE

SEGMENT ST/ CU-01

SUBDIVISION A-1 of 1

DATE 04/04/90

CHECKLIST

- ☒ N Arrow
- ☒ Approx. Scale
- ☒ Seg/Sub Bndry
- ☐ Oil Dist
- ☐ Width
- ☐ Length
- ☐ % Cover
- ☐ Substrate Character
- ☐ Est. HML/LWL
- ☐ SSL
- ☐ Profile Location(s)
- ☐ Profile(s)
- ☐ Pli Location(s)
- ☐ Photo Location(s)

LEGEND

1 Δ

Pli - No Subsurface Oil

2 $\blacktriangle$

Pli - Subsurface Oil

CT/C

Continuous Distribution

CT/B

Broken Distribution

CT/P

Patchy Distribution

CT/S

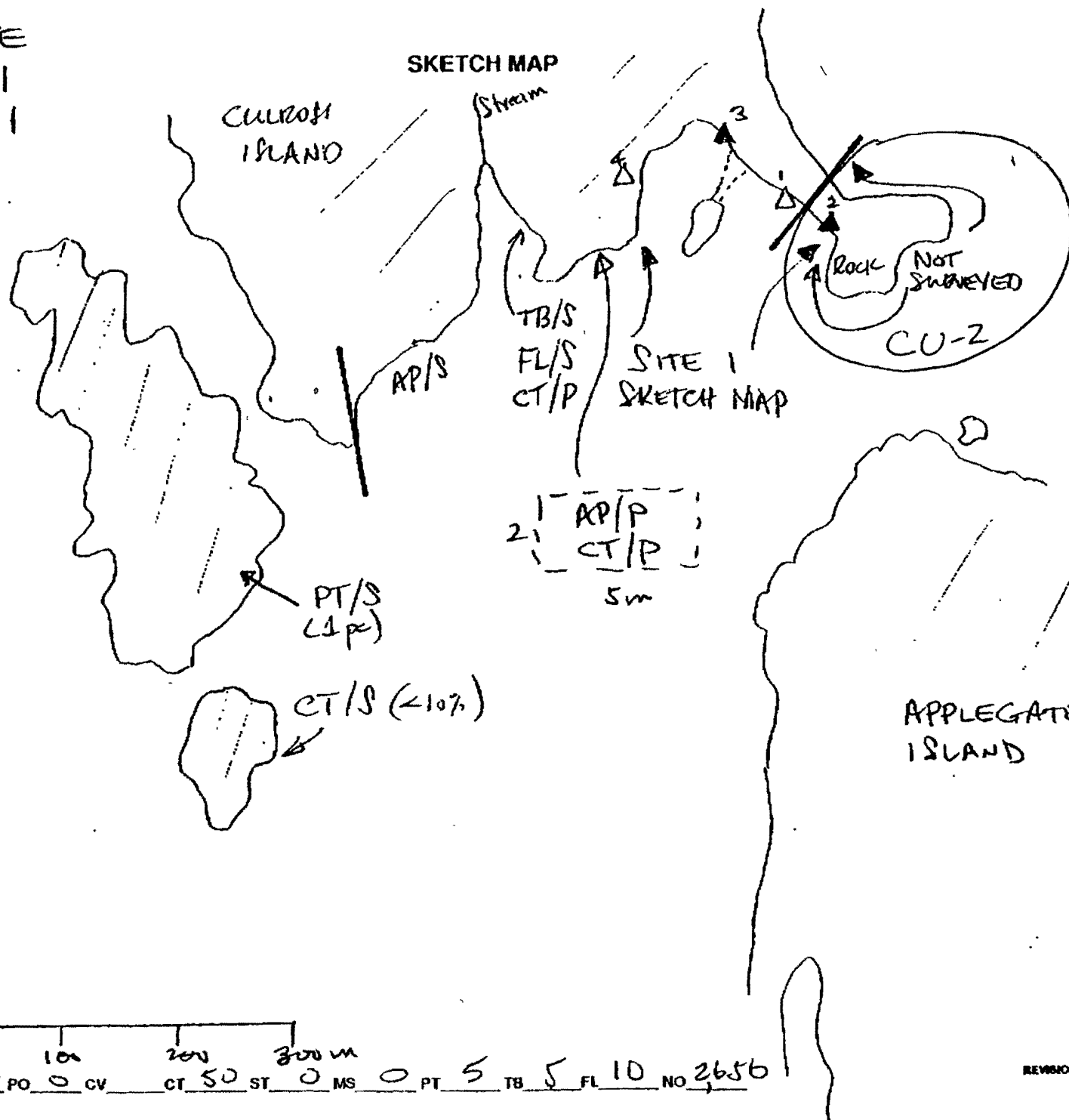
Splashed Distribution

Oiled Vegetation

1 $\rightarrow$

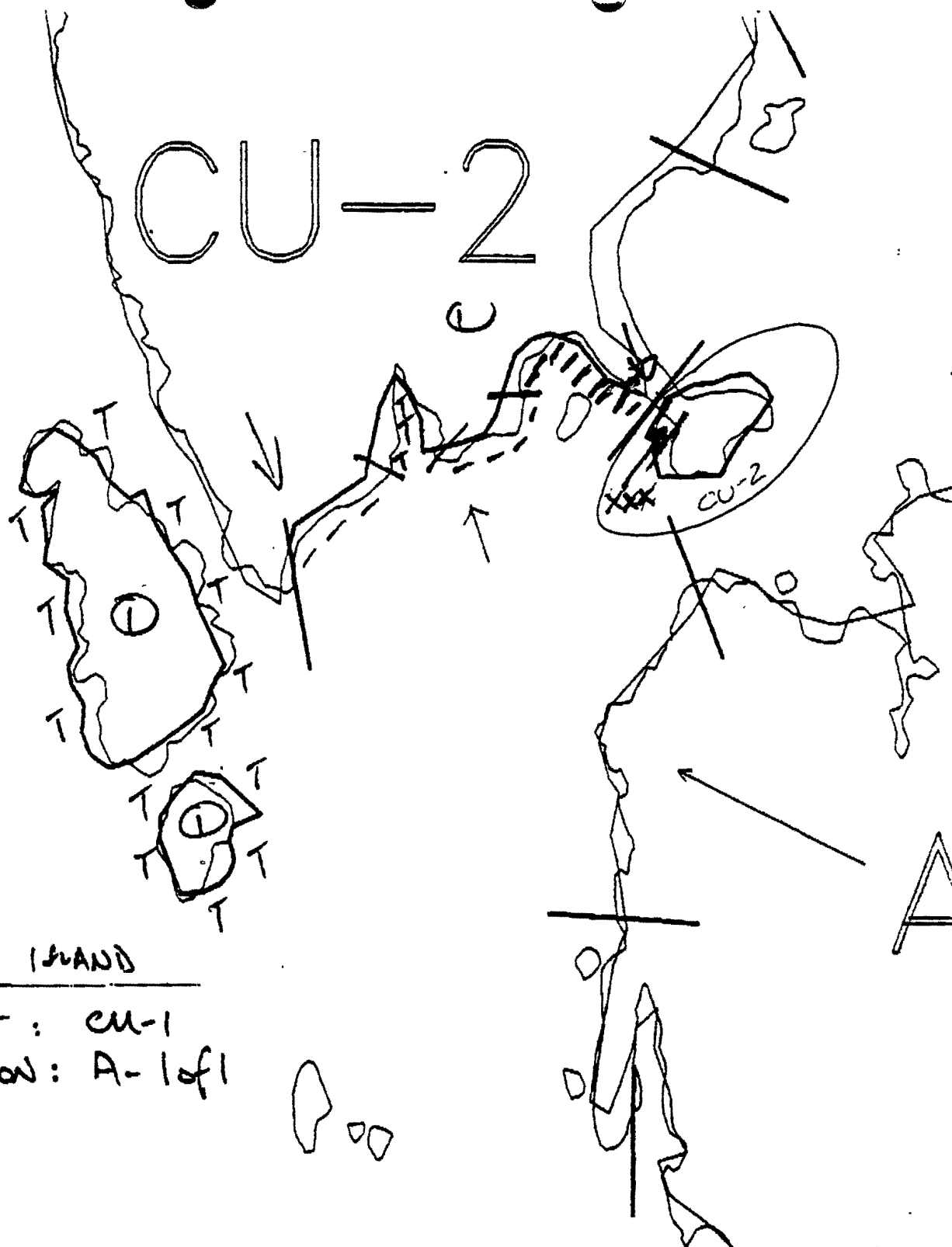
Photo location, direction,
and number

SKETCH MAP



REVISION: 02/24/90

ACE 7236757



CULROFF ISLAND

SEGMENT: CU-1

SUBDIVISION: A-1 of 1

XXXX Wide

//// Medium

--- Narrow

TTTT Very Light

0000 No Oil

CU-1

ADEC Segment Length: 2394m



Map Key: PWS-67

Name: GILLIE

Date: 4-4-90

Data Entered:

ACE 7236758 -/S

ADF&G MULTI-ASSESSMENT DATA FORM

ATW
Pre-AVAOSCAT-90

1 SURVEY TYPE: BS SS DS TS AVS SCHA MMHS PTA

2 REGION: PWS KP,CI K,AP

METHOD: Aerial Ground Boat

3 DATE: 4-13-90

15 HIGH TIDE TIMES: 1

21 TEAM RECORDER: R. Gurtia

4 START TIME: 0954

16 HIGH TIDE HTS: 1

22 OBSERVERS: B. Leiman

5 STOP TIME: 1002

17 LOW TIDE TIMES: 1

23 AGENCY: Exxon

6 SEGMENT #: CU001

18 LOW TIDE HTS: 1

24 PHOTOS TAKEN: Y (N)

7 STATION #:

19 TIDE HT AT SURVEY:

Roll #: Frame:

8 K-UNIT:

Ebb Slack Flood Slack

25 VIDEO TAKEN: Y (N) TAPE#:

9 STAT AREA:

20 USCG QUAD:

Start: End:

10 LAT:

11 LONG:

26 SAMPLES TAKEN? Y (N) Number

12 SOURCE: Map Loran

Oil

13 LOCATION: Culross Is.

Sediment

14 DESCRIPTION: South East side inside Applegate Is.

Biological

Water

EXTENT OF OIL

	SHORELINE				STREAM			
	L	W	M ²	%	L	W	M ²	%
27 SURFACE COVERAGE								
28 SURFACE THICKNESS								
29 PENETRATION								

30 OVERALL OIL IMPACT: N VL L M H

36 CATALOGED ANAD. FISH STREAM? (Y) N

31 OIL TYPE: Pooled Mousse Tar Asphalt Sticky Stain

37 CATALOG #: 224-26-12995

32 OILED DEBRIS? (Y) N

38 STREAM NAME:

33 SHORELINE TYPE: Headland Low-lying Rocks Beach Cove
Lagoon Marsh

39 OIL IN STREAM BED? Y (N)

34 WAVE EXPOSURE: High Moderate Low

40 OIL ON STREAM BANKS? (Y) N

35 SUBSTRATE TYPE: Bedrock 1 Boulder Cobble 1

41 OIL ON BEACH ADJACENT TO MOUTH? (Y) N
(within 50 meters)

Gravel 1 Sand Mud/silt

42 OIL WITHIN 1 MILE OF STREAM? (Y) N

Where: Upper Intertidal

43 ANADROMOUS FISH PRESENT? Y N

44 ANADROMOUS FISH OBSERVATION
Species Aerial Ground

COMMENTS: narrow bands of oiled /mousse/needles

at upper intertidal each bank.

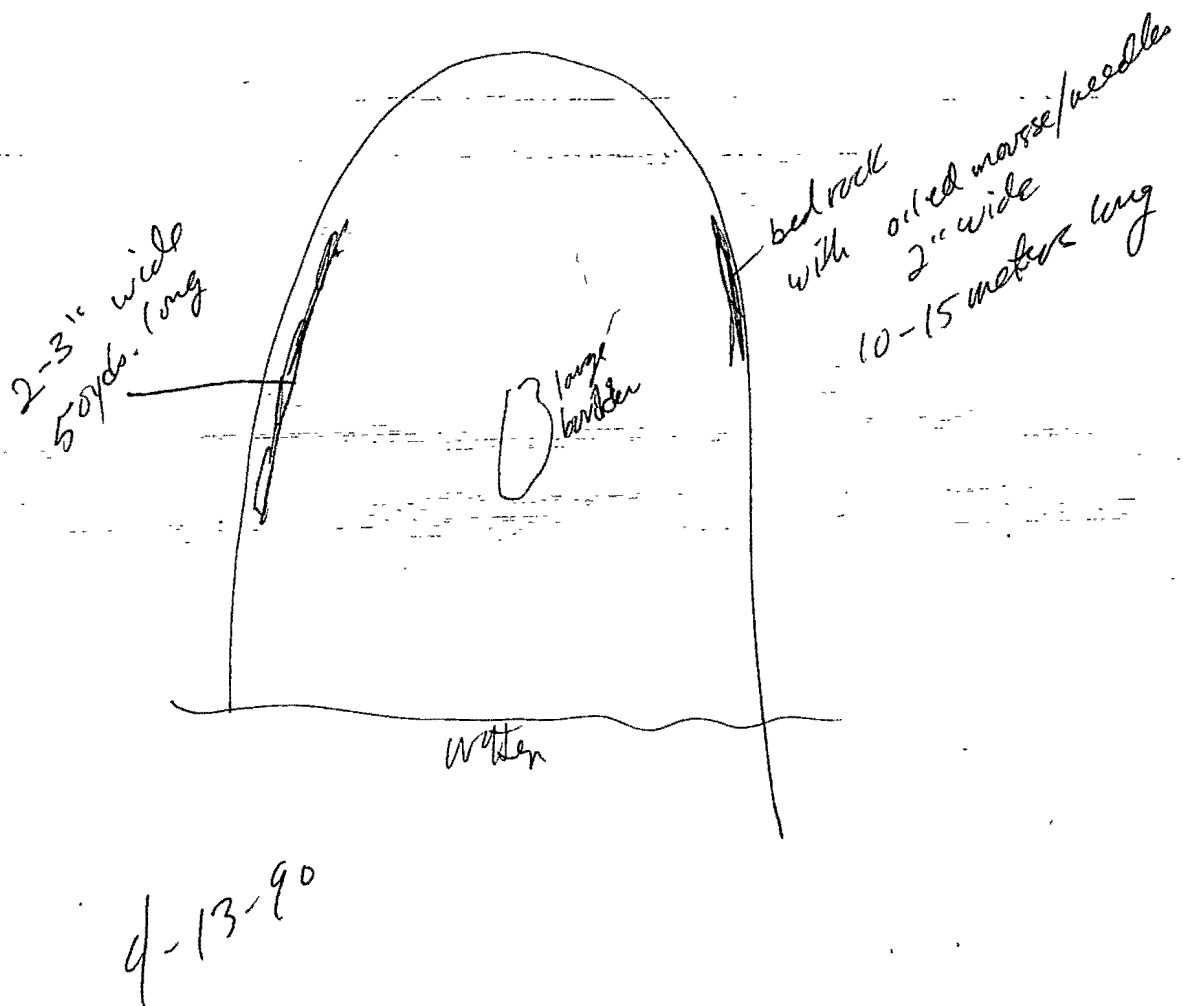
Shovel /Steam

ACE 7236759+1S

FRAME(S)

DESCRIPTION

46 OIL DISTRIBUTION DIAGRAM



CU001 ATW
224-20-12995

Sample taken
Photo frame # and
shot direction.

ACE 7236760-15